SC&A S. COHEN & ASSOCIATES
AN EMPLOYEE-OWNED COMPANY

December 10, 2007

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

Dear Mr. Miller:

On September 27, 2007, 36 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 7921_7924. 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

1000 MONTICELLO COURT • MONTGOMERY, ALABAMA • 36117 • 334.272.2234 • FAX 334.213.0407

COVER PAGE

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

NELAC Certification ID: NLC070001 (AL001)

Laboratory Report Identification Code: 7921_7924

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2155-ST	OH207-7921-01
SB-CZ-SS-2156-ST	OH207-7921-02
SB-CZ-SS-2157-ST	OH207-7921-03
SB-CZ-SS-2158-ST	OH207-7921-04
SB-CZ-SS-2159-ST	OH207-7921-05
SB-CZ-SS-2160-ST	OH207-7921-06
SB-CZ-SS-2161-ST	OH207-7921-07
SB-CZ-SS-2162-ST	OH207-7921-08
SB-CZ-SS-2163-ST	OH207-7921-09
SB-CZ-SS-2164-ST	OH207-7921-10
SB-CZ-SS-2165-ST	OH207-7921-11
SB-CZ-SS-2166-ST	OH207-7921-12
SB-CZ-SS-2167-ST	OH207-7921-13
SB-CZ-SS-2168-ST	OH207-7921-14
Preparation Blank (PB)	SCAQC-7921-PB1
Laboratory Control (LC)	SCAQC-7921-LC1
Laboratory Duplicate (LD)	SCAQC-7921-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: 7921_7924

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2155-SD	OH207-7922-01
SB-CZ-SS-2156-SD	OH207-7922-02
SB-CZ-SS-2157-SD	OH207-7922-03
SB-CZ-SS-2158-SD	OH207-7922-04
SB-CZ-SS-2159-SD	OH207-7922-05
SB-CZ-SS-2160-SD	OH207-7922-06
SB-CZ-SS-2161-SD	OH207-7922-07
SB-CZ-SS-2162-SD	OH207-7922-08
SB-CZ-SS-2163-SD	OH207-7922-09
SB-CZ-SS-2164-SD	OH207-7922-10
SB-CZ-SS-2165-SD	OH207-7922-11
SB-CZ-SS-2166-SD	OH207-7922-12
SB-CZ-SS-2167-SD	OH207-7922-13
SB-CZ-SS-2168-SD	OH207-7922-14
Preparation Blank (PB)	SCAQC-7922-PB1
Laboratory Control (LC)	SCAQC-7922-LC1
Laboratory Duplicate (LD)	SCAQC-7922-LD1

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2169-ST	OH207-7923-01
SB-CZ-SS-2170-ST	OH207-7923-02
SB-CZ-SS-2171-ST	OH207-7923-03
SB-CZ-SS-2172-ST	OH207-7923-04
Preparation Blank (PB)	SCAQC-7923-PB1
Laboratory Control (LC)	SCAQC-7923-LC1
Laboratory Duplicate (LD)	SCAQC-7923-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: 7921_7924

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2169-SD	OH207-7924-01
SB-CZ-SS-2170-SD	OH207-7924-02
SB-CZ-SS-2171-SD	OH207-7924-03
SB-CZ-SS-2172-SD	OH207-7924-04
Preparation Blank (PB)	SCAQC-7924-PB1
Laboratory Control (LC)	SCAQC-7924-LC1
Laboratory Duplicate (LD)	SCAQC-7924-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	Laboratory Director	12/10/2007
Name	Title	Date

COVER PAGE

Lab Name: GPL LABORATORIES, LLLP Contract:

Lab Code: Case No.: NRAS No.: SDG No.: 710030

SOW No.: SW846

EPA Sample No.	Lab Sample ID
SB-CZ-SS-2155-SD	S 710030-016-016-1/1
SB-CZ-SS-2155-ST	S 710030-001-001-1/1
SB-CZ-SS-2155-ST MS	SP710030-001-001-1/1
SB-CZ-SS-2155-ST MSD	SD710030-001-001-1/1
SB-CZ-SS-2156-SD	S 710030-017-017-1/1
SB-CZ-SS-2156-ST	S 710030-002-002-1/1
SB-CZ-SS-2157-SD	S 710030-018-018-1/1
SB-CZ-SS-2157-ST	S 710030-003-003-1/1
SB-CZ-SS-2158-SD	S 710030-019-019-1/1
SB-CZ-SS-2158-ST	S 710030-004-004-1/1
SB-CZ-SS-2159-SD	S 710030-020-020-1/1
SB-CZ-SS-2159-ST	S 710030-005-005-1/1
SB-CZ-SS-2160-SD	S 710030-021-021-1/1
SB-CZ-SS-2160-ST	S 710030-006-006-1/1
SB-CZ-SS-2161-SD	S 710030-022-022-1/1
SB-CZ-SS-2161-SD MS	SP710030-022-022-1/1
SB-CZ-SS-2161-SD MSD	SD710030-022-022-1/1
SB-CZ-SS-2161-ST	S 710030-007-007-1/1
SB-CZ-SS-2162-SD	S 710030-023-023-1/1
SB-CZ-SS-2162-ST	S 710030-008-008-1/1
SB-CZ-SS-2163-SD	S 710030-024-024-1/1
SB-CZ-SS-2163-ST	S 710030-009-009-1/1
SB-CZ-SS-2164-SD	S 710030-025-025-1/1
SB-CZ-SS-2164-ST	S 710030-010-010-1/1
SB-CZ-SS-2165-SD	S 710030-026-026-1/1
SB-CZ-SS-2165-ST	S 710030-011-011-1/1
SB-CZ-SS-2166-SD	S 710030-027-027-1/1
SB-CZ-SS-2166-ST	S 710030-012-012-1/1
SB-CZ-SS-2167-SD	S 710030-028-028-1/1
SB-CZ-SS-2167-ST	S 710030-014-014-1/1
SB-CZ-SS-2168-SD	S 710030-029-029-1/1
SB-CZ-SS-2168-ST	S 710030-015-015-1/1
SB-CZ-SS-2169-SD	S 710030-034-034-1/1
SB-CZ-SS-2169-ST	S 710030-030-030-1/1
SB-CZ-SS-2170-SD	S 710030-035-035-1/1

EPA Sample No.	Lab Sample ID
SB-CZ-SS-2170-ST	S 710030-031-031-1/1
SB-CZ-SS-2171-SD	S 710030-036-036-1/1
SB-CZ-SS-2171-ST	S 710030-032-032-1/1
SB-CZ-SS-2172-SD	S 710030-037-037-1/1
SB-CZ-SS-2172-ST	S 710030-033-033-1/1

		ICP-AES	ICP-MS
Were ICP-AES and ICP-MS interelement corrections applied?	(Yes/No)	YES	YES
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No)	YES	YES
if yes, were raw data generated before application of background corrections?	(Yes/No)	NO	YES

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 Turner

Date: 10/16/2007 Title: Production Manager

TABLE OF CONTENTS

Section Title	Page Number
Cover Page	N/A
Table of Contents	N/A
Chain of Custody(s)	1
Sample Receipt Checklist	4
Case Narrative	5
Sample and QC Results Summary	8
Preparation Logs	127
Soil Permits	141
Gamma Library	144
Standards Summary	147
Counting Raw Data	155

SC & A 1000 MONTICELLO COURT
CHAIN OF CUSTODY RECORD MONTGOMERY, AL 36117 (334) 272-2234 (334)213-0407 FAX

WORK ASIGNMENT #	PROJECT NAME:
07-3080.04	Schofield CZ

Client Name: JMC

Project Manager: Grea Miller

Requested Comp. Date

Notify Upon Receipt?

COC# 24

ANALYSIS REQUESTED

FOR LABORATORY USE

Item No.	Date	Time	Matrix	Sample I.D.	# of CONTAINERS		Gamma Spec & Lead					OH201	7921	Laboratory I.D.	Comments
1	9/24/2007		Soil	SB-CZ-SS-2155-ST	1		X						01		
2	9/24/2007		Soil	SB-CZ-SS-2156-ST	1		X						02		
3	9/24/2007		Soil	SB-CZ-SS-2157-ST	1		X						03		
4	9/24/2007		Soil	SB-CZ-SS-2158-ST	1		X						04		
5	9/24/2007		Soil	SB-CZ-SS-2159-ST	1		X						05		
6	9/24/2007		Soil	SB-CZ-SS-2160-ST	1		X						06		
7	9/24/2007		Soil	SB-CZ-SS-2161-ST	1		X						07		
8	9/24/2007		Soil	SB-CZ-SS-2162-ST	1		X						08		
9	9/24/2007		Soil	SB-CZ-SS-2163-ST	1		X						09		
10	9/24/2007		Soil	SB-CZ-SS-2164-ST	1		X						10		
11	9/24/2007		Soil	SB-CZ-SS-2165-ST	1		X						11		
12	9/24/2007		Soil	SB-CZ-SS-2166-ST	1		X						12		
13	9/24/2007		Soil	SB-CZ-SS-2167-ST	1		X						13		
14	9/24/2007		Soil	SB-CZ-SS-2168-ST	1		X						14		

Laboratory Prefix

Study I.D.

Pg 1 of 3

Sampled by and Title: Alfred Craig FSP

Received by: [signature] 9/24/07

Received by: [signature] SC&A Date/Time 9/27/07 8:45

Remarks:

Relinquished by: Alfred Craig FSP Date/Time

Relinquished by: Date/Time

Relinquished by: Date/Time

Sample shipped via Air Bill #

UPS FED-EX HAND OTHER

QC Level 1 2 3

COC ICE

ANA REQ TEMP

Cust Seal pH

Sample Condition

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	FOR LABORATORY USE
07-3080.04	Schofield CZ		

Client Name: JMC

Project Manager: Greg Miller

Requested Comp. Date

Notify Upon Receipt?

COG# 24

Laboratory Prefix

Study I.D.

Pg 2 of 3

Item No.	Date	Time	Matrix	Sample I.D.	# of CONTAINERS		Gamma Spec & Lead					04207	7922	Laboratory I.D.	Comments
1	9/24/2007		Soil	SB-CZ-SS-2155-SD	1		X						01		
2	9/24/2007		Soil	SB-CZ-SS-2156-SD	1		X						02		
3	9/24/2007		Soil	SB-CZ-SS-2157-SD	1		X						03		
4	9/24/2007		Soil	SB-CZ-SS-2158-SD	1		X						04		
5	9/24/2007		Soil	SB-CZ-SS-2159-SD	1		X						05		
6	9/24/2007		Soil	SB-CZ-SS-2160-SD	1		X						06		
7	9/24/2007		Soil	SB-CZ-SS-2161-SD	1		X						07		
8	9/24/2007		Soil	SB-CZ-SS-2162-SD	1		X						08		
9	9/24/2007		Soil	SB-CZ-SS-2163-SD	1		X						09		
10	9/24/2007		Soil	SB-CZ-SS-2164-SD	1		X						10		
11	9/24/2007		Soil	SB-CZ-SS-2165-SD	1		X						11		
12	9/24/2007		Soil	SB-CZ-SS-2166-SD	1		X						12		
13	9/24/2007		Soil	SB-CZ-SS-2167-SD	1		X						13		
14	9/24/2007		Soil	SB-CZ-SS-2168-SD	1		X						14		

Sampled by and Title Alfred Craig FSP	Date/Time 9-24-07	Relinquished by: Alfred Craig FSP	Date/Time
Received by:	Date/Time 9/24/07 8:45	Relinquished by:	Date/Time
Received by:	Date/Time	Relinquished by:	Date/Time
Remarks:		Sample shipped via UPS FED-EX HAND OTHER	Air Bill #

OC Level 1 2 3
COC ICE
ANA REQ TEMP
Cust Seal pH
Sample Condition

SC & A 1000 MONTICELLO COURT
CHAIN OF CUSTODY RECORD MONTGOMERY, AL 36117 (334) 272-2234 (334)213-0407 FAX

WORK ASIGNMENT #	PROJECT NAME:
07-3080.04	Schofield CZ

Client Name: JMC

Project Manager: Greg Miller

Requested Comp. Date

Notify Upon Receipt?

COC# 24

ANALYSIS REQUESTED

FOR LABORATORY USE

Laboratory Prefix

Study I.D.

Item No.	Date	Time	Matrix	Sample I.D.	# of CONTAINERS		Gamma Spec & Lead					OH2DT	7923	Laboratory I.D.	Comments
1	9/24/2007		Soil	SB-CZ-SS-2169-ST	1		X						01		
2	9/24/2007		Soil	SB-CZ-SS-2170-ST	1		X						02		
3	9/24/2007		Soil	SB-CZ-SS-2171-ST	1		X						03		
4	9/24/2007		Soil	SB-CZ-SS-2172-ST	1		X						04		
5	9/24/2007		Soil	SB-CZ-SS-2169-SD	1		X					07	7924 01		
6	9/24/2007		Soil	SB-CZ-SS-2170-SD	1		X						02		
7	9/24/2007		Soil	SB-CZ-SS-2171-SD	1		X						03		
8	9/24/2007		Soil	SB-CZ-SS-2172-SD	1		X						04		
9															
10															
11															
12															
13															
14															

Sampled by and Title Alfred Craig FSP	Date/Time 9-24-07	Relinquished by: Alfred Craig FSP	Date/Time
Received by: Edward Scott	Date/Time 9/27/07 0943	Relinquished by:	Date/Time
Received by:	Date/Time	Relinquished by:	Date/Time
Remarks:		Sample shipped via UPS FED-EX HAND OTHER	Air Bill #

OC Level 1 2 3
COC | ICE
ANA REQ | TEMP
Cust Seal | pH
Sample Condition

7921 7924 7927 7930 7933 7936
7922 7925 7928 7931 7934 7937
7923 7926 7929 7932 7935 7938 7939 - Soil

SAMPLE RECEIPT CHECKLIST

Receipt Date/Time: 9/27/07 8:45 # of Boxes in Shipment: 5

Client: OH207

Visible Inspection:

8592 3952 0516
8592 3952 0049
8592 3952 0050
#: 8592 3952 0068

Container Intact: ☑Yes ☐No
Any Leakage: ☑Yes ☐No
Airbill Present: ☑Yes ☐No
Tamper Proof Custody Seals: ☑Yes ☐No Intact: ☑Yes ☐No
Custody Seal No.'s: 8592 3952

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

External Smear: ☐Yes ☑No Contamination: ☐Yes ☑No

Internal Survey: Gamma ☑ Contamination: ☐Yes ☑No
Alpha ☑ Contamination: ☐Yes ☑No
Beta/Gamma ☑ 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 container didn't have collection date and time. Typo on COC

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: 7921_7924

NELAC Certification ID: NLC070001 (AL001)

December 10, 2007

I. Introduction

On September 27, 2007, 36 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 all samples except SB-CZ-SS-2161-ST, SB-CZ-SS-2168-SD, SB-CZ-SS-2171-ST, CZ-SS-2171-SD, and SCAQC-7922-LD1 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-7921-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7921-LC1	Laboratory Control
SB-CS-SS-2155-ST	SCAQC-7921-LD1	Laboratory Duplicate

SC&A QC Information - *Gamma*

Site Sample Number	Laboratory Sample Number	Quality Control Type
Laboratory Type II Water	SCAQC-7922-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7922-LC1	Laboratory Control
SB-CZ-SS-2155-SD	SCAQC-7922-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-7923-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7923-LC1	Laboratory Control
SB-CZ-SS-2169-ST	SCAQC-7923-LD1	Laboratory Duplicate

SC&A QC Information - *Gamma*

Site Sample Number	Laboratory Sample Number	Quality Control Type
Laboratory Type II Water	SCAQC-7924-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7924-LC1	Laboratory Control
SB-CZ-SS-2169-SD	SCAQC-7924-LD1	Laboratory Duplicate

GPL QC Information - *Lead*

Site Sample Number	Laboratory Sample Number	Quality Control Type
NA	BLK100842	Preparation Blank
NA	BKS100842	Laboratory Control
SB-CZ-SS-2155-ST	SP710030-001-001-1/1	MS/MSD

GPL QC Information - *Lead*

Site Sample Number	Laboratory Sample Number	Quality Control Type
NA	BLK100777	Preparation Blank
NA	BKS100777	Laboratory Control
SB-CZ-SS-2161-SD	SP710030-022-022-1/1	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

12/10/2007
Date

SAMPLE AND QC RESULTS SUMMARY

SC&A, Inc.
Southeastern Environmental Laboratory

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2155-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-01	11/03/07 18:40	5.99	0.605	0.852	0.216
DOE 4.5.2.3	CO-60	OH207-7921-01	11/03/07 18:40	0.006	0.015	0.015	0.025
DOE 4.5.2.3	RH-101	OH207-7921-01	11/03/07 18:40	-0.007	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7921-01	11/03/07 18:40	0.006	0.039	0.039	0.067
DOE 4.5.2.3	CS-137	OH207-7921-01	11/03/07 18:40	0.169	0.039	0.043	0.028
DOE 4.5.2.3	EU-155	OH207-7921-01	11/03/07 18:40	0.064	0.057	0.057	0.099
DOE 4.5.2.3	TL-208	OH207-7921-01	11/03/07 18:40	0.346	0.049	0.060	0.026
DOE 4.5.2.3	PO-209	OH207-7921-01	11/03/07 18:40	-0.326	2.70	2.70	4.70
DOE 4.5.2.3	BI-211	OH207-7921-01	11/03/07 18:40	0.094	0.441	0.441	0.781
DOE 4.5.2.3	BI-212	OH207-7921-01	11/03/07 18:40	0.840	0.221	0.237	0.182
DOE 4.5.2.3	PB-212	OH207-7921-01	11/03/07 18:40	0.956	0.089	0.131	0.041
DOE 4.5.2.3	BI-214	OH207-7921-01	11/03/07 18:40	0.731	0.102	0.126	0.047
DOE 4.5.2.3	PB-214	OH207-7921-01	11/03/07 18:40	0.807	0.090	0.121	0.049
DOE 4.5.2.3	RA-223	OH207-7921-01	11/03/07 18:40	0.408	0.141	0.147	0.127
DOE 4.5.2.3	AC-228	OH207-7921-01	11/03/07 18:40	1.03	0.143	0.176	0.089
DOE 4.5.2.3	PA-233	OH207-7921-01	11/03/07 18:40	0.022	0.028	0.028	0.049
DOE 4.5.2.3	PA-234M	OH207-7921-01	11/03/07 18:40	0.667	1.68	1.69	3.02
DOE 4.5.2.3	TH-234	OH207-7921-01	11/03/07 18:40	1.27	0.437	0.455	0.587
DOE 4.5.2.3	U-235	OH207-7921-01	11/03/07 18:40	-0.007	0.100	0.100	0.166
DOE 4.5.2.3	NP-236	OH207-7921-01	11/03/07 18:40	0.034	0.034	0.034	0.058
DOE 4.5.2.3	NP-237	OH207-7921-01	11/03/07 18:40	0.568	0.204	0.212	0.210
DOE 4.5.2.3	NP-239	OH207-7921-01	11/03/07 18:40	-0.044	0.105	0.105	0.168
DOE 4.5.2.3	AM-241	OH207-7921-01	11/03/07 18:40	-0.047	0.092	0.092	0.156
DOE 4.5.2.3	AM-243	OH207-7921-01	11/03/07 18:40	0.231	0.065	0.069	0.050
DOE 4.5.2.3	CM-243	OH207-7921-01	11/03/07 18:40	-7.8e-04	0.052	0.052	0.087
DOE 4.5.2.3	AM-246	OH207-7921-01	11/03/07 18:40	0.031	0.044	0.044	0.082
DOE 4.5.2.3	CF-249	OH207-7921-01	11/03/07 18:40	-0.005	0.018	0.018	0.030

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2156-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-02	11/03/07 14:45	2.65	0.435	0.509	0.234
DOE 4.5.2.3	CO-60	OH207-7921-02	11/03/07 14:45	-0.002	0.016	0.016	0.027
DOE 4.5.2.3	RH-101	OH207-7921-02	11/03/07 14:45	-0.014	0.018	0.018	0.030
DOE 4.5.2.3	SB-125	OH207-7921-02	11/03/07 14:45	0.013	0.043	0.043	0.076
DOE 4.5.2.3	CS-137	OH207-7921-02	11/03/07 14:45	0.202	0.038	0.043	0.033
DOE 4.5.2.3	EU-155	OH207-7921-02	11/03/07 14:45	0.013	0.050	0.050	0.087
DOE 4.5.2.3	TL-208	OH207-7921-02	11/03/07 14:45	0.274	0.043	0.051	0.029
DOE 4.5.2.3	PO-209	OH207-7921-02	11/03/07 14:45	0.189	3.07	3.07	5.49
DOE 4.5.2.3	BI-211	OH207-7921-02	11/03/07 14:45	0.080	0.486	0.486	0.839
DOE 4.5.2.3	BI-212	OH207-7921-02	11/03/07 14:45	0.435	0.247	0.251	0.212
DOE 4.5.2.3	PB-212	OH207-7921-02	11/03/07 14:45	0.947	0.091	0.131	0.049
DOE 4.5.2.3	BI-214	OH207-7921-02	11/03/07 14:45	0.871	0.107	0.138	0.057
DOE 4.5.2.3	PB-214	OH207-7921-02	11/03/07 14:45	0.958	0.113	0.148	0.056
DOE 4.5.2.3	RA-223	OH207-7921-02	11/03/07 14:45	0.335	0.153	0.157	0.147
DOE 4.5.2.3	AC-228	OH207-7921-02	11/03/07 14:45	0.978	0.157	0.185	0.097
DOE 4.5.2.3	PA-233	OH207-7921-02	11/03/07 14:45	-0.006	0.033	0.033	0.054
DOE 4.5.2.3	PA-234M	OH207-7921-02	11/03/07 14:45	2.13	1.94	1.95	3.66
DOE 4.5.2.3	TH-234	OH207-7921-02	11/03/07 14:45	1.22	0.340	0.362	0.338
DOE 4.5.2.3	U-235	OH207-7921-02	11/03/07 14:45	0.083	0.109	0.109	0.188
DOE 4.5.2.3	NP-236	OH207-7921-02	11/03/07 14:45	0.033	0.031	0.031	0.048
DOE 4.5.2.3	NP-237	OH207-7921-02	11/03/07 14:45	0.509	0.136	0.145	0.147
DOE 4.5.2.3	NP-239	OH207-7921-02	11/03/07 14:45	0.075	0.114	0.115	0.196
DOE 4.5.2.3	AM-241	OH207-7921-02	11/03/07 14:45	0.029	0.034	0.034	0.051
DOE 4.5.2.3	AM-243	OH207-7921-02	11/03/07 14:45	0.167	0.042	0.045	0.028
DOE 4.5.2.3	CM-243	OH207-7921-02	11/03/07 14:45	-0.030	0.045	0.045	0.077
DOE 4.5.2.3	AM-246	OH207-7921-02	11/03/07 14:45	0.018	0.056	0.056	0.101
DOE 4.5.2.3	CF-249	OH207-7921-02	11/03/07 14:45	0.013	0.020	0.020	0.035

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2157-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-03	11/03/07 18:43	3.80	0.508	0.634	0.264
DOE 4.5.2.3	CO-60	OH207-7921-03	11/03/07 18:43	0.003	0.017	0.017	0.030
DOE 4.5.2.3	RH-101	OH207-7921-03	11/03/07 18:43	-0.009	0.018	0.018	0.029
DOE 4.5.2.3	SB-125	OH207-7921-03	11/03/07 18:43	-0.027	0.043	0.043	0.072
DOE 4.5.2.3	CS-137	OH207-7921-03	11/03/07 18:43	0.133	0.036	0.039	0.032
DOE 4.5.2.3	EU-155	OH207-7921-03	11/03/07 18:43	0.047	0.051	0.052	0.090
DOE 4.5.2.3	TL-208	OH207-7921-03	11/03/07 18:43	0.322	0.048	0.058	0.030
DOE 4.5.2.3	PO-209	OH207-7921-03	11/03/07 18:43	-1.04	3.32	3.32	5.75
DOE 4.5.2.3	BI-211	OH207-7921-03	11/03/07 18:43	-0.150	0.483	0.483	0.805
DOE 4.5.2.3	BI-212	OH207-7921-03	11/03/07 18:43	0.677	0.260	0.269	0.212
DOE 4.5.2.3	PB-212	OH207-7921-03	11/03/07 18:43	1.02	0.095	0.139	0.046
DOE 4.5.2.3	BI-214	OH207-7921-03	11/03/07 18:43	0.869	0.104	0.136	0.054
DOE 4.5.2.3	PB-214	OH207-7921-03	11/03/07 18:43	0.939	0.112	0.146	0.057
DOE 4.5.2.3	RA-223	OH207-7921-03	11/03/07 18:43	0.382	0.162	0.166	0.147
DOE 4.5.2.3	AC-228	OH207-7921-03	11/03/07 18:43	1.08	0.177	0.207	0.112
DOE 4.5.2.3	PA-233	OH207-7921-03	11/03/07 18:43	0.014	0.032	0.032	0.054
DOE 4.5.2.3	PA-234M	OH207-7921-03	11/03/07 18:43	1.37	1.94	1.95	3.58
DOE 4.5.2.3	TH-234	OH207-7921-03	11/03/07 18:43	1.23	0.340	0.362	0.342
DOE 4.5.2.3	U-235	OH207-7921-03	11/03/07 18:43	0.063	0.108	0.108	0.186
DOE 4.5.2.3	NP-236	OH207-7921-03	11/03/07 18:43	0.020	0.033	0.033	0.048
DOE 4.5.2.3	NP-237	OH207-7921-03	11/03/07 18:43	0.536	0.138	0.148	0.149
DOE 4.5.2.3	NP-239	OH207-7921-03	11/03/07 18:43	-0.087	0.118	0.118	0.193
DOE 4.5.2.3	AM-241	OH207-7921-03	11/03/07 18:43	0.056	0.035	0.035	0.053
DOE 4.5.2.3	AM-243	OH207-7921-03	11/03/07 18:43	0.172	0.043	0.046	0.029
DOE 4.5.2.3	CM-243	OH207-7921-03	11/03/07 18:43	-0.006	0.046	0.046	0.079
DOE 4.5.2.3	AM-246	OH207-7921-03	11/03/07 18:43	0.023	0.059	0.059	0.107
DOE 4.5.2.3	CF-249	OH207-7921-03	11/03/07 18:43	0.013	0.019	0.019	0.035

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2158-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-04	11/03/07 21:54	3.66	0.462	0.590	0.205
DOE 4.5.2.3	CO-60	OH207-7921-04	11/03/07 21:54	0.003	0.014	0.014	0.024
DOE 4.5.2.3	RH-101	OH207-7921-04	11/03/07 21:54	-0.007	0.015	0.015	0.025
DOE 4.5.2.3	SB-125	OH207-7921-04	11/03/07 21:54	0.017	0.040	0.040	0.070
DOE 4.5.2.3	CS-137	OH207-7921-04	11/03/07 21:54	0.126	0.034	0.036	0.032
DOE 4.5.2.3	EU-155	OH207-7921-04	11/03/07 21:54	0.065	0.057	0.057	0.099
DOE 4.5.2.3	TL-208	OH207-7921-04	11/03/07 21:54	0.314	0.049	0.058	0.027
DOE 4.5.2.3	PO-209	OH207-7921-04	11/03/07 21:54	0.198	2.56	2.56	4.53
DOE 4.5.2.3	BI-211	OH207-7921-04	11/03/07 21:54	-0.140	0.414	0.414	0.708
DOE 4.5.2.3	BI-212	OH207-7921-04	11/03/07 21:54	0.752	0.248	0.260	0.187
DOE 4.5.2.3	PB-212	OH207-7921-04	11/03/07 21:54	1.01	0.093	0.138	0.043
DOE 4.5.2.3	BI-214	OH207-7921-04	11/03/07 21:54	0.742	0.105	0.128	0.047
DOE 4.5.2.3	PB-214	OH207-7921-04	11/03/07 21:54	0.861	0.096	0.129	0.048
DOE 4.5.2.3	RA-223	OH207-7921-04	11/03/07 21:54	0.356	0.126	0.130	0.126
DOE 4.5.2.3	AC-228	OH207-7921-04	11/03/07 21:54	1.18	0.136	0.180	0.081
DOE 4.5.2.3	PA-233	OH207-7921-04	11/03/07 21:54	-0.008	0.027	0.027	0.046
DOE 4.5.2.3	PA-234M	OH207-7921-04	11/03/07 21:54	0.765	1.60	1.60	2.90
DOE 4.5.2.3	TH-234	OH207-7921-04	11/03/07 21:54	1.15	0.401	0.417	0.569
DOE 4.5.2.3	U-235	OH207-7921-04	11/03/07 21:54	0.100	0.100	0.101	0.171
DOE 4.5.2.3	NP-236	OH207-7921-04	11/03/07 21:54	0.026	0.032	0.032	0.056
DOE 4.5.2.3	NP-237	OH207-7921-04	11/03/07 21:54	0.529	0.194	0.201	0.232
DOE 4.5.2.3	NP-239	OH207-7921-04	11/03/07 21:54	-0.038	0.102	0.102	0.164
DOE 4.5.2.3	AM-241	OH207-7921-04	11/03/07 21:54	-0.036	0.092	0.092	0.158
DOE 4.5.2.3	AM-243	OH207-7921-04	11/03/07 21:54	0.222	0.064	0.068	0.050
DOE 4.5.2.3	CM-243	OH207-7921-04	11/03/07 21:54	-0.036	0.051	0.052	0.085
DOE 4.5.2.3	AM-246	OH207-7921-04	11/03/07 21:54	0.038	0.046	0.046	0.086
DOE 4.5.2.3	CF-249	OH207-7921-04	11/03/07 21:54	0.004	0.017	0.017	0.030

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2159-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-05	11/03/07 21:55	3.62	0.474	0.597	0.201
DOE 4.5.2.3	CO-60	OH207-7921-05	11/03/07 21:55	0.005	0.013	0.013	0.022
DOE 4.5.2.3	RH-101	OH207-7921-05	11/03/07 21:55	-0.010	0.016	0.016	0.024
DOE 4.5.2.3	SB-125	OH207-7921-05	11/03/07 21:55	-0.023	0.042	0.042	0.069
DOE 4.5.2.3	CS-137	OH207-7921-05	11/03/07 21:55	0.200	0.037	0.042	0.024
DOE 4.5.2.3	EU-155	OH207-7921-05	11/03/07 21:55	0.045	0.055	0.055	0.094
DOE 4.5.2.3	TL-208	OH207-7921-05	11/03/07 21:55	0.280	0.047	0.055	0.024
DOE 4.5.2.3	PO-209	OH207-7921-05	11/03/07 21:55	0.752	2.66	2.66	4.74
DOE 4.5.2.3	BI-211	OH207-7921-05	11/03/07 21:55	0.132	0.441	0.442	0.780
DOE 4.5.2.3	BI-212	OH207-7921-05	11/03/07 21:55	0.580	0.183	0.192	0.188
DOE 4.5.2.3	PB-212	OH207-7921-05	11/03/07 21:55	0.793	0.085	0.116	0.046
DOE 4.5.2.3	BI-214	OH207-7921-05	11/03/07 21:55	0.841	0.118	0.145	0.049
DOE 4.5.2.3	PB-214	OH207-7921-05	11/03/07 21:55	0.896	0.101	0.135	0.050
DOE 4.5.2.3	RA-223	OH207-7921-05	11/03/07 21:55	0.174	0.086	0.088	0.130
DOE 4.5.2.3	AC-228	OH207-7921-05	11/03/07 21:55	0.948	0.147	0.175	0.083
DOE 4.5.2.3	PA-233	OH207-7921-05	11/03/07 21:55	0.009	0.026	0.026	0.046
DOE 4.5.2.3	PA-234M	OH207-7921-05	11/03/07 21:55	2.02	1.66	1.68	3.16
DOE 4.5.2.3	TH-234	OH207-7921-05	11/03/07 21:55	0.926	0.455	0.465	0.541
DOE 4.5.2.3	U-235	OH207-7921-05	11/03/07 21:55	0.051	0.102	0.102	0.168
DOE 4.5.2.3	NP-236	OH207-7921-05	11/03/07 21:55	0.021	0.035	0.035	0.053
DOE 4.5.2.3	NP-237	OH207-7921-05	11/03/07 21:55	0.150	0.156	0.156	0.238
DOE 4.5.2.3	NP-239	OH207-7921-05	11/03/07 21:55	0.018	0.098	0.098	0.170
DOE 4.5.2.3	AM-241	OH207-7921-05	11/03/07 21:55	-0.045	0.083	0.083	0.138
DOE 4.5.2.3	AM-243	OH207-7921-05	11/03/07 21:55	0.176	0.052	0.055	0.048
DOE 4.5.2.3	CM-243	OH207-7921-05	11/03/07 21:55	-0.021	0.050	0.050	0.082
DOE 4.5.2.3	AM-246	OH207-7921-05	11/03/07 21:55	0.035	0.044	0.044	0.081
DOE 4.5.2.3	CF-249	OH207-7921-05	11/03/07 21:55	0.010	0.017	0.017	0.030

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2160-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-06	11/03/07 21:56	5.80	0.600	0.835	0.242
DOE 4.5.2.3	CO-60	OH207-7921-06	11/03/07 21:56	0.008	0.019	0.019	0.032
DOE 4.5.2.3	RH-101	OH207-7921-06	11/03/07 21:56	0.003	0.019	0.019	0.033
DOE 4.5.2.3	SB-125	OH207-7921-06	11/03/07 21:56	-0.013	0.049	0.049	0.085
DOE 4.5.2.3	CS-137	OH207-7921-06	11/03/07 21:56	0.174	0.038	0.042	0.037
DOE 4.5.2.3	EU-155	OH207-7921-06	11/03/07 21:56	0.041	0.055	0.055	0.096
DOE 4.5.2.3	TL-208	OH207-7921-06	11/03/07 21:56	0.359	0.052	0.064	0.031
DOE 4.5.2.3	PO-209	OH207-7921-06	11/03/07 21:56	0.537	3.80	3.80	6.77
DOE 4.5.2.3	BI-211	OH207-7921-06	11/03/07 21:56	0.306	0.548	0.549	0.968
DOE 4.5.2.3	BI-212	OH207-7921-06	11/03/07 21:56	0.906	0.317	0.330	0.250
DOE 4.5.2.3	PB-212	OH207-7921-06	11/03/07 21:56	1.17	0.108	0.159	0.050
DOE 4.5.2.3	BI-214	OH207-7921-06	11/03/07 21:56	0.911	0.113	0.145	0.062
DOE 4.5.2.3	PB-214	OH207-7921-06	11/03/07 21:56	0.954	0.112	0.147	0.062
DOE 4.5.2.3	RA-223	OH207-7921-06	11/03/07 21:56	0.322	0.135	0.139	0.172
DOE 4.5.2.3	AC-228	OH207-7921-06	11/03/07 21:56	1.20	0.168	0.207	0.114
DOE 4.5.2.3	PA-233	OH207-7921-06	11/03/07 21:56	-0.008	0.035	0.035	0.058
DOE 4.5.2.3	PA-234M	OH207-7921-06	11/03/07 21:56	0.615	2.13	2.13	3.82
DOE 4.5.2.3	TH-234	OH207-7921-06	11/03/07 21:56	1.26	0.370	0.390	0.369
DOE 4.5.2.3	U-235	OH207-7921-06	11/03/07 21:56	0.042	0.118	0.118	0.202
DOE 4.5.2.3	NP-236	OH207-7921-06	11/03/07 21:56	0.045	0.037	0.037	0.054
DOE 4.5.2.3	NP-237	OH207-7921-06	11/03/07 21:56	0.667	0.136	0.152	0.164
DOE 4.5.2.3	NP-239	OH207-7921-06	11/03/07 21:56	0.009	0.126	0.126	0.212
DOE 4.5.2.3	AM-241	OH207-7921-06	11/03/07 21:56	0.050	0.038	0.038	0.058
DOE 4.5.2.3	AM-243	OH207-7921-06	11/03/07 21:56	0.194	0.050	0.053	0.031
DOE 4.5.2.3	CM-243	OH207-7921-06	11/03/07 21:56	0.009	0.050	0.050	0.086
DOE 4.5.2.3	AM-246	OH207-7921-06	11/03/07 21:56	0.040	0.063	0.063	0.116
DOE 4.5.2.3	CF-249	OH207-7921-06	11/03/07 21:56	6.1e-04	0.021	0.021	0.037

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2161-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-07	11/04/07 00:56	4.86	0.550	0.734	0.247
DOE 4.5.2.3	CO-60	OH207-7921-07	11/04/07 00:56	0.010	0.015	0.015	0.026
DOE 4.5.2.3	RH-101	OH207-7921-07	11/04/07 00:56	-0.009	0.018	0.018	0.029
DOE 4.5.2.3	SB-125	OH207-7921-07	11/04/07 00:56	0.003	0.045	0.045	0.078
DOE 4.5.2.3	CS-137	OH207-7921-07	11/04/07 00:56	0.114	0.031	0.033	0.033
DOE 4.5.2.3	EU-155	OH207-7921-07	11/04/07 00:56	0.033	0.066	0.066	0.114
DOE 4.5.2.3	TL-208	OH207-7921-07	11/04/07 00:56	0.356	0.056	0.066	0.029
DOE 4.5.2.3	PO-209	OH207-7921-07	11/04/07 00:56	-1.87	3.04	3.04	5.04
DOE 4.5.2.3	BI-211	OH207-7921-07	11/04/07 00:56	-0.473	0.461	0.463	0.746
DOE 4.5.2.3	BI-212	OH207-7921-07	11/04/07 00:56	0.678	0.216	0.227	0.225
DOE 4.5.2.3	PB-212	OH207-7921-07	11/04/07 00:56	1.07	0.101	0.147	0.048
DOE 4.5.2.3	BI-214	OH207-7921-07	11/04/07 00:56	0.882	0.118	0.147	0.053
DOE 4.5.2.3	PB-214	OH207-7921-07	11/04/07 00:56	0.934	0.114	0.147	0.054
DOE 4.5.2.3	RA-223	OH207-7921-07	11/04/07 00:56	0.346	0.143	0.147	0.142
DOE 4.5.2.3	AC-228	OH207-7921-07	11/04/07 00:56	1.23	0.164	0.205	0.106
DOE 4.5.2.3	PA-233	OH207-7921-07	11/04/07 00:56	-0.015	0.031	0.031	0.052
DOE 4.5.2.3	PA-234M	OH207-7921-07	11/04/07 00:56	1.04	1.82	1.82	3.33
DOE 4.5.2.3	TH-234	OH207-7921-07	11/04/07 00:56	1.66	0.504	0.531	0.673
DOE 4.5.2.3	U-235	OH207-7921-07	11/04/07 00:56	0.168	0.113	0.114	0.196
DOE 4.5.2.3	NP-236	OH207-7921-07	11/04/07 00:56	0.008	0.038	0.038	0.064
DOE 4.5.2.3	NP-237	OH207-7921-07	11/04/07 00:56	0.945	0.290	0.305	0.235
DOE 4.5.2.3	NP-239	OH207-7921-07	11/04/07 00:56	-0.038	0.116	0.116	0.187
DOE 4.5.2.3	AM-241	OH207-7921-07	11/04/07 00:56	-0.032	0.103	0.103	0.178
DOE 4.5.2.3	AM-243	OH207-7921-07	11/04/07 00:56	0.251	0.069	0.074	0.058
DOE 4.5.2.3	CM-243	OH207-7921-07	11/04/07 00:56	-0.016	0.060	0.060	0.102
DOE 4.5.2.3	AM-246	OH207-7921-07	11/04/07 00:56	0.015	0.056	0.056	0.100
DOE 4.5.2.3	CF-249	OH207-7921-07	11/04/07 00:56	0.010	0.019	0.019	0.033

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2162-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-08	11/04/07 00:58	3.93	0.504	0.639	0.224
DOE 4.5.2.3	CO-60	OH207-7921-08	11/04/07 00:58	-0.010	0.016	0.016	0.026
DOE 4.5.2.3	RH-101	OH207-7921-08	11/04/07 00:58	3.1e-04	0.017	0.017	0.027
DOE 4.5.2.3	SB-125	OH207-7921-08	11/04/07 00:58	0.010	0.043	0.043	0.074
DOE 4.5.2.3	CS-137	OH207-7921-08	11/04/07 00:58	0.216	0.040	0.046	0.030
DOE 4.5.2.3	EU-155	OH207-7921-08	11/04/07 00:58	0.065	0.060	0.060	0.103
DOE 4.5.2.3	TL-208	OH207-7921-08	11/04/07 00:58	0.319	0.051	0.060	0.027
DOE 4.5.2.3	PO-209	OH207-7921-08	11/04/07 00:58	1.40	3.10	3.11	5.58
DOE 4.5.2.3	BI-211	OH207-7921-08	11/04/07 00:58	0.425	0.450	0.452	0.757
DOE 4.5.2.3	BI-212	OH207-7921-08	11/04/07 00:58	0.551	0.272	0.277	0.207
DOE 4.5.2.3	PB-212	OH207-7921-08	11/04/07 00:58	0.938	0.089	0.129	0.045
DOE 4.5.2.3	BI-214	OH207-7921-08	11/04/07 00:58	0.786	0.112	0.137	0.051
DOE 4.5.2.3	PB-214	OH207-7921-08	11/04/07 00:58	0.834	0.097	0.128	0.054
DOE 4.5.2.3	RA-223	OH207-7921-08	11/04/07 00:58	0.185	0.101	0.103	0.134
DOE 4.5.2.3	AC-228	OH207-7921-08	11/04/07 00:58	0.996	0.168	0.195	0.095
DOE 4.5.2.3	PA-233	OH207-7921-08	11/04/07 00:58	-0.015	0.029	0.029	0.048
DOE 4.5.2.3	PA-234M	OH207-7921-08	11/04/07 00:58	2.02	1.84	1.85	3.49
DOE 4.5.2.3	TH-234	OH207-7921-08	11/04/07 00:58	1.52	0.462	0.486	0.591
DOE 4.5.2.3	U-235	OH207-7921-08	11/04/07 00:58	-0.093	0.110	0.110	0.174
DOE 4.5.2.3	NP-236	OH207-7921-08	11/04/07 00:58	0.056	0.036	0.036	0.060
DOE 4.5.2.3	NP-237	OH207-7921-08	11/04/07 00:58	0.542	0.172	0.180	0.219
DOE 4.5.2.3	NP-239	OH207-7921-08	11/04/07 00:58	0.018	0.100	0.101	0.175
DOE 4.5.2.3	AM-241	OH207-7921-08	11/04/07 00:58	-0.081	0.089	0.089	0.147
DOE 4.5.2.3	AM-243	OH207-7921-08	11/04/07 00:58	0.191	0.055	0.058	0.053
DOE 4.5.2.3	CM-243	OH207-7921-08	11/04/07 00:58	0.003	0.053	0.053	0.089
DOE 4.5.2.3	AM-246	OH207-7921-08	11/04/07 00:58	0.054	0.050	0.051	0.096
DOE 4.5.2.3	CF-249	OH207-7921-08	11/04/07 00:58	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-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2163-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-09	11/04/07 00:59	4.36	0.603	0.744	0.298
DOE 4.5.2.3	CO-60	OH207-7921-09	11/04/07 00:59	0.010	0.018	0.018	0.031
DOE 4.5.2.3	RH-101	OH207-7921-09	11/04/07 00:59	-0.019	0.020	0.020	0.032
DOE 4.5.2.3	SB-125	OH207-7921-09	11/04/07 00:59	0.022	0.051	0.051	0.090
DOE 4.5.2.3	CS-137	OH207-7921-09	11/04/07 00:59	0.283	0.057	0.064	0.034
DOE 4.5.2.3	EU-155	OH207-7921-09	11/04/07 00:59	0.028	0.057	0.057	0.098
DOE 4.5.2.3	TL-208	OH207-7921-09	11/04/07 00:59	0.328	0.048	0.058	0.033
DOE 4.5.2.3	PO-209	OH207-7921-09	11/04/07 00:59	2.10	3.71	3.71	6.82
DOE 4.5.2.3	BI-211	OH207-7921-09	11/04/07 00:59	-0.766	0.566	0.571	0.862
DOE 4.5.2.3	BI-212	OH207-7921-09	11/04/07 00:59	0.561	0.212	0.219	0.256
DOE 4.5.2.3	PB-212	OH207-7921-09	11/04/07 00:59	1.04	0.102	0.146	0.054
DOE 4.5.2.3	BI-214	OH207-7921-09	11/04/07 00:59	0.944	0.120	0.153	0.062
DOE 4.5.2.3	PB-214	OH207-7921-09	11/04/07 00:59	0.958	0.116	0.151	0.064
DOE 4.5.2.3	RA-223	OH207-7921-09	11/04/07 00:59	0.277	0.145	0.147	0.162
DOE 4.5.2.3	AC-228	OH207-7921-09	11/04/07 00:59	1.04	0.184	0.212	0.121
DOE 4.5.2.3	PA-233	OH207-7921-09	11/04/07 00:59	0.013	0.037	0.037	0.063
DOE 4.5.2.3	PA-234M	OH207-7921-09	11/04/07 00:59	2.99	3.00	3.01	3.46
DOE 4.5.2.3	TH-234	OH207-7921-09	11/04/07 00:59	0.956	0.455	0.465	0.410
DOE 4.5.2.3	U-235	OH207-7921-09	11/04/07 00:59	-0.046	0.118	0.119	0.200
DOE 4.5.2.3	NP-236	OH207-7921-09	11/04/07 00:59	0.027	0.037	0.037	0.054
DOE 4.5.2.3	NP-237	OH207-7921-09	11/04/07 00:59	0.415	0.157	0.163	0.196
DOE 4.5.2.3	NP-239	OH207-7921-09	11/04/07 00:59	0.007	0.129	0.129	0.218
DOE 4.5.2.3	AM-241	OH207-7921-09	11/04/07 00:59	0.048	0.040	0.041	0.061
DOE 4.5.2.3	AM-243	OH207-7921-09	11/04/07 00:59	0.175	0.048	0.051	0.034
DOE 4.5.2.3	CM-243	OH207-7921-09	11/04/07 00:59	-0.026	0.051	0.051	0.087
DOE 4.5.2.3	AM-246	OH207-7921-09	11/04/07 00:59	0.093	0.067	0.068	0.130
DOE 4.5.2.3	CF-249	OH207-7921-09	11/04/07 00:59	0.012	0.022	0.022	0.039

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2164-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-10	11/04/07 10:39	4.19	0.532	0.677	0.191
DOE 4.5.2.3	CO-60	OH207-7921-10	11/04/07 10:39	-0.008	0.014	0.014	0.021
DOE 4.5.2.3	RH-101	OH207-7921-10	11/04/07 10:39	-0.001	0.015	0.015	0.025
DOE 4.5.2.3	SB-125	OH207-7921-10	11/04/07 10:39	0.019	0.040	0.040	0.069
DOE 4.5.2.3	CS-137	OH207-7921-10	11/04/07 10:39	0.140	0.033	0.036	0.030
DOE 4.5.2.3	EU-155	OH207-7921-10	11/04/07 10:39	0.069	0.056	0.057	0.098
DOE 4.5.2.3	TL-208	OH207-7921-10	11/04/07 10:39	0.279	0.043	0.051	0.026
DOE 4.5.2.3	PO-209	OH207-7921-10	11/04/07 10:39	2.70	2.90	2.91	5.33
DOE 4.5.2.3	BI-211	OH207-7921-10	11/04/07 10:39	0.156	0.430	0.430	0.681
DOE 4.5.2.3	BI-212	OH207-7921-10	11/04/07 10:39	0.697	0.195	0.207	0.187
DOE 4.5.2.3	PB-212	OH207-7921-10	11/04/07 10:39	1.01	0.094	0.137	0.043
DOE 4.5.2.3	BI-214	OH207-7921-10	11/04/07 10:39	0.861	0.114	0.143	0.049
DOE 4.5.2.3	PB-214	OH207-7921-10	11/04/07 10:39	0.899	0.098	0.133	0.049
DOE 4.5.2.3	RA-223	OH207-7921-10	11/04/07 10:39	0.233	0.104	0.106	0.129
DOE 4.5.2.3	AC-228	OH207-7921-10	11/04/07 10:39	0.999	0.148	0.178	0.088
DOE 4.5.2.3	PA-233	OH207-7921-10	11/04/07 10:39	0.007	0.026	0.026	0.046
DOE 4.5.2.3	PA-234M	OH207-7921-10	11/04/07 10:39	1.50	1.53	1.54	2.88
DOE 4.5.2.3	TH-234	OH207-7921-10	11/04/07 10:39	1.38	0.447	0.467	0.555
DOE 4.5.2.3	U-235	OH207-7921-10	11/04/07 10:39	0.145	0.098	0.100	0.170
DOE 4.5.2.3	NP-236	OH207-7921-10	11/04/07 10:39	0.065	0.034	0.035	0.057
DOE 4.5.2.3	NP-237	OH207-7921-10	11/04/07 10:39	0.508	0.184	0.190	0.229
DOE 4.5.2.3	NP-239	OH207-7921-10	11/04/07 10:39	-0.058	0.104	0.104	0.165
DOE 4.5.2.3	AM-241	OH207-7921-10	11/04/07 10:39	0.049	0.088	0.088	0.155
DOE 4.5.2.3	AM-243	OH207-7921-10	11/04/07 10:39	0.180	0.056	0.059	0.049
DOE 4.5.2.3	CM-243	OH207-7921-10	11/04/07 10:39	0.012	0.051	0.051	0.087
DOE 4.5.2.3	AM-246	OH207-7921-10	11/04/07 10:39	-0.008	0.051	0.051	0.086
DOE 4.5.2.3	CF-249	OH207-7921-10	11/04/07 10:39	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-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2165-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-11	11/04/07 10:40	3.80	0.446	0.586	0.186
DOE 4.5.2.3	CO-60	OH207-7921-11	11/04/07 10:40	0.003	0.014	0.014	0.022
DOE 4.5.2.3	RH-101	OH207-7921-11	11/04/07 10:40	-0.010	0.016	0.016	0.024
DOE 4.5.2.3	SB-125	OH207-7921-11	11/04/07 10:40	0.013	0.039	0.039	0.067
DOE 4.5.2.3	CS-137	OH207-7921-11	11/04/07 10:40	0.169	0.037	0.041	0.029
DOE 4.5.2.3	EU-155	OH207-7921-11	11/04/07 10:40	0.035	0.052	0.052	0.089
DOE 4.5.2.3	TL-208	OH207-7921-11	11/04/07 10:40	0.289	0.045	0.054	0.024
DOE 4.5.2.3	PO-209	OH207-7921-11	11/04/07 10:40	-0.869	2.73	2.73	4.64
DOE 4.5.2.3	BI-211	OH207-7921-11	11/04/07 10:40	-0.382	0.406	0.408	0.657
DOE 4.5.2.3	BI-212	OH207-7921-11	11/04/07 10:40	0.582	0.203	0.211	0.178
DOE 4.5.2.3	PB-212	OH207-7921-11	11/04/07 10:40	0.789	0.075	0.109	0.041
DOE 4.5.2.3	BI-214	OH207-7921-11	11/04/07 10:40	0.755	0.106	0.130	0.049
DOE 4.5.2.3	PB-214	OH207-7921-11	11/04/07 10:40	0.817	0.093	0.124	0.047
DOE 4.5.2.3	RA-223	OH207-7921-11	11/04/07 10:40	0.186	0.121	0.123	0.125
DOE 4.5.2.3	AC-228	OH207-7921-11	11/04/07 10:40	0.838	0.142	0.165	0.085
DOE 4.5.2.3	PA-233	OH207-7921-11	11/04/07 10:40	0.010	0.027	0.027	0.047
DOE 4.5.2.3	PA-234M	OH207-7921-11	11/04/07 10:40	3.63	1.72	1.76	3.42
DOE 4.5.2.3	TH-234	OH207-7921-11	11/04/07 10:40	0.297	0.272	0.274	0.520
DOE 4.5.2.3	U-235	OH207-7921-11	11/04/07 10:40	0.070	0.099	0.099	0.164
DOE 4.5.2.3	NP-236	OH207-7921-11	11/04/07 10:40	0.034	0.031	0.032	0.054
DOE 4.5.2.3	NP-237	OH207-7921-11	11/04/07 10:40	0.376	0.148	0.153	0.209
DOE 4.5.2.3	NP-239	OH207-7921-11	11/04/07 10:40	0.014	0.092	0.092	0.160
DOE 4.5.2.3	AM-241	OH207-7921-11	11/04/07 10:40	0.006	0.078	0.078	0.134
DOE 4.5.2.3	AM-243	OH207-7921-11	11/04/07 10:40	0.157	0.046	0.049	0.044
DOE 4.5.2.3	CM-243	OH207-7921-11	11/04/07 10:40	-0.047	0.048	0.049	0.078
DOE 4.5.2.3	AM-246	OH207-7921-11	11/04/07 10:40	0.054	0.049	0.049	0.092
DOE 4.5.2.3	CF-249	OH207-7921-11	11/04/07 10:40	0.012	0.016	0.017	0.029

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2166-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-12	11/04/07 10:41	4.74	0.615	0.777	0.267
DOE 4.5.2.3	CO-60	OH207-7921-12	11/04/07 10:41	-0.008	0.019	0.019	0.029
DOE 4.5.2.3	RH-101	OH207-7921-12	11/04/07 10:41	-0.006	0.018	0.018	0.031
DOE 4.5.2.3	SB-125	OH207-7921-12	11/04/07 10:41	0.018	0.048	0.048	0.085
DOE 4.5.2.3	CS-137	OH207-7921-12	11/04/07 10:41	0.132	0.044	0.046	0.034
DOE 4.5.2.3	EU-155	OH207-7921-12	11/04/07 10:41	0.044	0.052	0.052	0.091
DOE 4.5.2.3	TL-208	OH207-7921-12	11/04/07 10:41	0.295	0.050	0.058	0.028
DOE 4.5.2.3	PO-209	OH207-7921-12	11/04/07 10:41	-0.516	3.46	3.46	6.08
DOE 4.5.2.3	BI-211	OH207-7921-12	11/04/07 10:41	-0.398	0.512	0.513	0.822
DOE 4.5.2.3	BI-212	OH207-7921-12	11/04/07 10:41	0.721	0.230	0.242	0.246
DOE 4.5.2.3	PB-212	OH207-7921-12	11/04/07 10:41	0.970	0.093	0.134	0.049
DOE 4.5.2.3	BI-214	OH207-7921-12	11/04/07 10:41	0.759	0.110	0.133	0.058
DOE 4.5.2.3	PB-214	OH207-7921-12	11/04/07 10:41	0.869	0.103	0.135	0.060
DOE 4.5.2.3	RA-223	OH207-7921-12	11/04/07 10:41	0.276	0.173	0.175	0.155
DOE 4.5.2.3	AC-228	OH207-7921-12	11/04/07 10:41	1.01	0.173	0.200	0.120
DOE 4.5.2.3	PA-233	OH207-7921-12	11/04/07 10:41	-0.023	0.034	0.034	0.056
DOE 4.5.2.3	PA-234M	OH207-7921-12	11/04/07 10:41	0.720	2.11	2.11	3.80
DOE 4.5.2.3	TH-234	OH207-7921-12	11/04/07 10:41	1.14	0.377	0.394	0.357
DOE 4.5.2.3	U-235	OH207-7921-12	11/04/07 10:41	0.106	0.112	0.113	0.195
DOE 4.5.2.3	NP-236	OH207-7921-12	11/04/07 10:41	0.033	0.034	0.034	0.050
DOE 4.5.2.3	NP-237	OH207-7921-12	11/04/07 10:41	0.503	0.161	0.168	0.155
DOE 4.5.2.3	NP-239	OH207-7921-12	11/04/07 10:41	-2.2e-04	0.117	0.117	0.197
DOE 4.5.2.3	AM-241	OH207-7921-12	11/04/07 10:41	0.053	0.036	0.037	0.056
DOE 4.5.2.3	AM-243	OH207-7921-12	11/04/07 10:41	0.161	0.043	0.046	0.030
DOE 4.5.2.3	CM-243	OH207-7921-12	11/04/07 10:41	0.025	0.047	0.047	0.082
DOE 4.5.2.3	AM-246	OH207-7921-12	11/04/07 10:41	-0.022	0.064	0.064	0.110
DOE 4.5.2.3	CF-249	OH207-7921-12	11/04/07 10:41	0.010	0.021	0.021	0.037

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2167-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-13	11/04/07 13:51	3.82	0.478	0.612	0.198
DOE 4.5.2.3	CO-60	OH207-7921-13	11/04/07 13:51	-0.011	0.016	0.016	0.024
DOE 4.5.2.3	RH-101	OH207-7921-13	11/04/07 13:51	-0.008	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7921-13	11/04/07 13:51	0.021	0.041	0.041	0.072
DOE 4.5.2.3	CS-137	OH207-7921-13	11/04/07 13:51	0.144	0.036	0.039	0.029
DOE 4.5.2.3	EU-155	OH207-7921-13	11/04/07 13:51	0.039	0.058	0.058	0.100
DOE 4.5.2.3	TL-208	OH207-7921-13	11/04/07 13:51	0.338	0.052	0.062	0.023
DOE 4.5.2.3	PO-209	OH207-7921-13	11/04/07 13:51	-1.89	2.90	2.91	4.80
DOE 4.5.2.3	BI-211	OH207-7921-13	11/04/07 13:51	-0.250	0.403	0.404	0.677
DOE 4.5.2.3	BI-212	OH207-7921-13	11/04/07 13:51	0.787	0.233	0.246	0.192
DOE 4.5.2.3	PB-212	OH207-7921-13	11/04/07 13:51	0.949	0.090	0.131	0.042
DOE 4.5.2.3	BI-214	OH207-7921-13	11/04/07 13:51	0.928	0.126	0.156	0.047
DOE 4.5.2.3	PB-214	OH207-7921-13	11/04/07 13:51	0.995	0.111	0.149	0.050
DOE 4.5.2.3	RA-223	OH207-7921-13	11/04/07 13:51	0.359	0.124	0.129	0.123
DOE 4.5.2.3	AC-228	OH207-7921-13	11/04/07 13:51	0.977	0.132	0.164	0.088
DOE 4.5.2.3	PA-233	OH207-7921-13	11/04/07 13:51	0.004	0.028	0.028	0.048
DOE 4.5.2.3	PA-234M	OH207-7921-13	11/04/07 13:51	0.580	1.67	1.67	3.00
DOE 4.5.2.3	TH-234	OH207-7921-13	11/04/07 13:51	1.20	0.340	0.361	0.584
DOE 4.5.2.3	U-235	OH207-7921-13	11/04/07 13:51	0.069	0.101	0.101	0.171
DOE 4.5.2.3	NP-236	OH207-7921-13	11/04/07 13:51	0.039	0.037	0.037	0.059
DOE 4.5.2.3	NP-237	OH207-7921-13	11/04/07 13:51	0.686	0.197	0.208	0.208
DOE 4.5.2.3	NP-239	OH207-7921-13	11/04/07 13:51	-0.013	0.107	0.107	0.174
DOE 4.5.2.3	AM-241	OH207-7921-13	11/04/07 13:51	-0.085	0.091	0.092	0.153
DOE 4.5.2.3	AM-243	OH207-7921-13	11/04/07 13:51	0.183	0.056	0.058	0.051
DOE 4.5.2.3	CM-243	OH207-7921-13	11/04/07 13:51	0.042	0.052	0.052	0.089
DOE 4.5.2.3	AM-246	OH207-7921-13	11/04/07 13:51	-0.020	0.051	0.051	0.085
DOE 4.5.2.3	CF-249	OH207-7921-13	11/04/07 13:51	0.005	0.017	0.017	0.030

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2168-ST				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7921	Laboratory Code:	SCA

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	OH207-7921-14	11/04/07 13:52	5.43	0.560	0.780	0.192
DOE 4.5.2.3	CO-60	OH207-7921-14	11/04/07 13:52	-0.007	0.014	0.014	0.023
DOE 4.5.2.3	RH-101	OH207-7921-14	11/04/07 13:52	0.007	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7921-14	11/04/07 13:52	0.007	0.040	0.040	0.068
DOE 4.5.2.3	CS-137	OH207-7921-14	11/04/07 13:52	0.069	0.029	0.029	0.029
DOE 4.5.2.3	EU-155	OH207-7921-14	11/04/07 13:52	0.066	0.057	0.057	0.098
DOE 4.5.2.3	TL-208	OH207-7921-14	11/04/07 13:52	0.368	0.053	0.065	0.023
DOE 4.5.2.3	PO-209	OH207-7921-14	11/04/07 13:52	1.93	2.66	2.67	4.87
DOE 4.5.2.3	BI-211	OH207-7921-14	11/04/07 13:52	-0.105	0.439	0.439	0.750
DOE 4.5.2.3	BI-212	OH207-7921-14	11/04/07 13:52	0.782	0.202	0.217	0.191
DOE 4.5.2.3	PB-212	OH207-7921-14	11/04/07 13:52	0.997	0.091	0.135	0.043
DOE 4.5.2.3	BI-214	OH207-7921-14	11/04/07 13:52	0.720	0.107	0.129	0.046
DOE 4.5.2.3	PB-214	OH207-7921-14	11/04/07 13:52	0.732	0.092	0.117	0.046
DOE 4.5.2.3	RA-223	OH207-7921-14	11/04/07 13:52	0.179	0.108	0.109	0.127
DOE 4.5.2.3	AC-228	OH207-7921-14	11/04/07 13:52	1.03	0.144	0.176	0.084
DOE 4.5.2.3	PA-233	OH207-7921-14	11/04/07 13:52	-0.002	0.027	0.027	0.047
DOE 4.5.2.3	PA-234M	OH207-7921-14	11/04/07 13:52	0.598	1.67	1.67	2.99
DOE 4.5.2.3	TH-234	OH207-7921-14	11/04/07 13:52	1.44	0.427	0.450	0.544
DOE 4.5.2.3	U-235	OH207-7921-14	11/04/07 13:52	0.041	0.099	0.099	0.163
DOE 4.5.2.3	NP-236	OH207-7921-14	11/04/07 13:52	0.028	0.035	0.035	0.054
DOE 4.5.2.3	NP-237	OH207-7921-14	11/04/07 13:52	0.672	0.192	0.203	0.196
DOE 4.5.2.3	NP-239	OH207-7921-14	11/04/07 13:52	0.055	0.095	0.095	0.166
DOE 4.5.2.3	AM-241	OH207-7921-14	11/04/07 13:52	-0.048	0.080	0.080	0.134
DOE 4.5.2.3	AM-243	OH207-7921-14	11/04/07 13:52	0.197	0.054	0.058	0.048
DOE 4.5.2.3	CM-243	OH207-7921-14	11/04/07 13:52	0.036	0.051	0.051	0.087
DOE 4.5.2.3	AM-246	OH207-7921-14	11/04/07 13:52	0.026	0.052	0.052	0.093
DOE 4.5.2.3	CF-249	OH207-7921-14	11/04/07 13:52	0.024	0.017	0.017	0.031

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2155-SD				
Other Sample ID:		Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
		Batch Number:	7922	Laboratory Code:	SCA

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	OH207-7922-01	11/04/07 21:02	4.38	0.589	0.734	0.292
DOE 4.5.2.3	CO-60	OH207-7922-01	11/04/07 21:02	0.015	0.021	0.021	0.034
DOE 4.5.2.3	RH-101	OH207-7922-01	11/04/07 21:02	-0.002	0.020	0.020	0.033
DOE 4.5.2.3	SB-125	OH207-7922-01	11/04/07 21:02	-0.029	0.054	0.054	0.091
DOE 4.5.2.3	CS-137	OH207-7922-01	11/04/07 21:02	0.003	0.023	0.023	0.040
DOE 4.5.2.3	EU-155	OH207-7922-01	11/04/07 21:02	0.076	0.068	0.069	0.099
DOE 4.5.2.3	TL-208	OH207-7922-01	11/04/07 21:02	0.351	0.057	0.067	0.036
DOE 4.5.2.3	PO-209	OH207-7922-01	11/04/07 21:02	-0.529	4.18	4.18	7.35
DOE 4.5.2.3	BI-211	OH207-7922-01	11/04/07 21:02	-0.224	0.599	0.599	0.996
DOE 4.5.2.3	BI-212	OH207-7922-01	11/04/07 21:02	0.602	0.352	0.357	0.258
DOE 4.5.2.3	PB-212	OH207-7922-01	11/04/07 21:02	1.08	0.105	0.150	0.053
DOE 4.5.2.3	BI-214	OH207-7922-01	11/04/07 21:02	0.493	0.101	0.112	0.068
DOE 4.5.2.3	PB-214	OH207-7922-01	11/04/07 21:02	0.599	0.087	0.105	0.068
DOE 4.5.2.3	RA-223	OH207-7922-01	11/04/07 21:02	0.419	0.164	0.169	0.177
DOE 4.5.2.3	AC-228	OH207-7922-01	11/04/07 21:02	1.25	0.181	0.220	0.107
DOE 4.5.2.3	PA-233	OH207-7922-01	11/04/07 21:02	-0.022	0.036	0.036	0.059
DOE 4.5.2.3	PA-234M	OH207-7922-01	11/04/07 21:02	0.816	2.35	2.36	4.26
DOE 4.5.2.3	TH-234	OH207-7922-01	11/04/07 21:02	1.30	0.460	0.478	0.383
DOE 4.5.2.3	U-235	OH207-7922-01	11/04/07 21:02	-0.031	0.123	0.123	0.208
DOE 4.5.2.3	NP-236	OH207-7922-01	11/04/07 21:02	0.047	0.038	0.038	0.056
DOE 4.5.2.3	NP-237	OH207-7922-01	11/04/07 21:02	0.299	0.134	0.137	0.182
DOE 4.5.2.3	NP-239	OH207-7922-01	11/04/07 21:02	0.085	0.131	0.131	0.226
DOE 4.5.2.3	AM-241	OH207-7922-01	11/04/07 21:02	0.012	0.042	0.042	0.061
DOE 4.5.2.3	AM-243	OH207-7922-01	11/04/07 21:02	0.204	0.053	0.057	0.034
DOE 4.5.2.3	CM-243	OH207-7922-01	11/04/07 21:02	0.069	0.062	0.062	0.093
DOE 4.5.2.3	AM-246	OH207-7922-01	11/04/07 21:02	-0.060	0.065	0.065	0.105
DOE 4.5.2.3	CF-249	OH207-7922-01	11/04/07 21:02	-0.011	0.022	0.022	0.037

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2156-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-02	11/04/07 17:06	2.98	0.425	0.519	0.191
DOE 4.5.2.3	CO-60	OH207-7922-02	11/04/07 17:06	-0.005	0.012	0.012	0.022
DOE 4.5.2.3	RH-101	OH207-7922-02	11/04/07 17:06	0.006	0.016	0.016	0.025
DOE 4.5.2.3	SB-125	OH207-7922-02	11/04/07 17:06	0.017	0.037	0.037	0.064
DOE 4.5.2.3	CS-137	OH207-7922-02	11/04/07 17:06	0.076	0.032	0.033	0.024
DOE 4.5.2.3	EU-155	OH207-7922-02	11/04/07 17:06	-0.018	0.053	0.053	0.087
DOE 4.5.2.3	TL-208	OH207-7922-02	11/04/07 17:06	0.296	0.048	0.056	0.025
DOE 4.5.2.3	PO-209	OH207-7922-02	11/04/07 17:06	-3.09	2.80	2.81	4.33
DOE 4.5.2.3	BI-211	OH207-7922-02	11/04/07 17:06	-0.425	0.405	0.407	0.649
DOE 4.5.2.3	BI-212	OH207-7922-02	11/04/07 17:06	0.637	0.178	0.190	0.188
DOE 4.5.2.3	PB-212	OH207-7922-02	11/04/07 17:06	0.852	0.079	0.116	0.040
DOE 4.5.2.3	BI-214	OH207-7922-02	11/04/07 17:06	0.920	0.123	0.154	0.045
DOE 4.5.2.3	PB-214	OH207-7922-02	11/04/07 17:06	0.935	0.100	0.137	0.050
DOE 4.5.2.3	RA-223	OH207-7922-02	11/04/07 17:06	0.288	0.119	0.123	0.122
DOE 4.5.2.3	AC-228	OH207-7922-02	11/04/07 17:06	0.981	0.148	0.177	0.085
DOE 4.5.2.3	PA-233	OH207-7922-02	11/04/07 17:06	0.012	0.026	0.026	0.045
DOE 4.5.2.3	PA-234M	OH207-7922-02	11/04/07 17:06	0.591	1.59	1.59	2.85
DOE 4.5.2.3	TH-234	OH207-7922-02	11/04/07 17:06	0.592	0.302	0.308	0.518
DOE 4.5.2.3	U-235	OH207-7922-02	11/04/07 17:06	-0.053	0.097	0.097	0.156
DOE 4.5.2.3	NP-236	OH207-7922-02	11/04/07 17:06	0.019	0.035	0.035	0.053
DOE 4.5.2.3	NP-237	OH207-7922-02	11/04/07 17:06	0.416	0.149	0.155	0.197
DOE 4.5.2.3	NP-239	OH207-7922-02	11/04/07 17:06	0.009	0.094	0.094	0.163
DOE 4.5.2.3	AM-241	OH207-7922-02	11/04/07 17:06	0.031	0.078	0.078	0.135
DOE 4.5.2.3	AM-243	OH207-7922-02	11/04/07 17:06	0.166	0.047	0.050	0.044
DOE 4.5.2.3	CM-243	OH207-7922-02	11/04/07 17:06	0.002	0.047	0.047	0.079
DOE 4.5.2.3	AM-246	OH207-7922-02	11/04/07 17:06	-0.001	0.049	0.049	0.084
DOE 4.5.2.3	CF-249	OH207-7922-02	11/04/07 17:06	0.006	0.016	0.016	0.028

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2157-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-03	11/04/07 17:07	4.57	0.530	0.700	0.262
DOE 4.5.2.3	CO-60	OH207-7922-03	11/04/07 17:07	0.011	0.016	0.016	0.028
DOE 4.5.2.3	RH-101	OH207-7922-03	11/04/07 17:07	8.0e-04	0.017	0.017	0.029
DOE 4.5.2.3	SB-125	OH207-7922-03	11/04/07 17:07	0.014	0.044	0.044	0.077
DOE 4.5.2.3	CS-137	OH207-7922-03	11/04/07 17:07	0.076	0.028	0.029	0.034
DOE 4.5.2.3	EU-155	OH207-7922-03	11/04/07 17:07	0.061	0.050	0.051	0.088
DOE 4.5.2.3	TL-208	OH207-7922-03	11/04/07 17:07	0.354	0.051	0.062	0.029
DOE 4.5.2.3	PO-209	OH207-7922-03	11/04/07 17:07	2.01	3.23	3.23	5.90
DOE 4.5.2.3	BI-211	OH207-7922-03	11/04/07 17:07	-0.440	0.500	0.502	0.797
DOE 4.5.2.3	BI-212	OH207-7922-03	11/04/07 17:07	0.914	0.248	0.265	0.219
DOE 4.5.2.3	PB-212	OH207-7922-03	11/04/07 17:07	1.16	0.105	0.157	0.047
DOE 4.5.2.3	BI-214	OH207-7922-03	11/04/07 17:07	0.774	0.094	0.122	0.052
DOE 4.5.2.3	PB-214	OH207-7922-03	11/04/07 17:07	0.839	0.101	0.131	0.057
DOE 4.5.2.3	RA-223	OH207-7922-03	11/04/07 17:07	0.370	0.141	0.145	0.151
DOE 4.5.2.3	AC-228	OH207-7922-03	11/04/07 17:07	1.19	0.153	0.194	0.091
DOE 4.5.2.3	PA-233	OH207-7922-03	11/04/07 17:07	0.017	0.032	0.032	0.054
DOE 4.5.2.3	PA-234M	OH207-7922-03	11/04/07 17:07	3.03	1.98	2.00	3.78
DOE 4.5.2.3	TH-234	OH207-7922-03	11/04/07 17:07	1.17	0.328	0.348	0.320
DOE 4.5.2.3	U-235	OH207-7922-03	11/04/07 17:07	0.083	0.107	0.107	0.184
DOE 4.5.2.3	NP-236	OH207-7922-03	11/04/07 17:07	0.029	0.032	0.032	0.047
DOE 4.5.2.3	NP-237	OH207-7922-03	11/04/07 17:07	0.519	0.132	0.142	0.139
DOE 4.5.2.3	NP-239	OH207-7922-03	11/04/07 17:07	0.078	0.115	0.115	0.196
DOE 4.5.2.3	AM-241	OH207-7922-03	11/04/07 17:07	0.037	0.033	0.033	0.050
DOE 4.5.2.3	AM-243	OH207-7922-03	11/04/07 17:07	0.182	0.044	0.048	0.028
DOE 4.5.2.3	CM-243	OH207-7922-03	11/04/07 17:07	0.002	0.045	0.045	0.078
DOE 4.5.2.3	AM-246	OH207-7922-03	11/04/07 17:07	0.030	0.059	0.059	0.106
DOE 4.5.2.3	CF-249	OH207-7922-03	11/04/07 17:07	0.005	0.019	0.019	0.033

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2158-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-04	11/04/07 21:04	4.07	0.488	0.636	0.250
DOE 4.5.2.3	CO-60	OH207-7922-04	11/04/07 21:04	0.009	0.014	0.014	0.020
DOE 4.5.2.3	RH-101	OH207-7922-04	11/04/07 21:04	0.005	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7922-04	11/04/07 21:04	0.031	0.044	0.044	0.076
DOE 4.5.2.3	CS-137	OH207-7922-04	11/04/07 21:04	0.198	0.047	0.051	0.028
DOE 4.5.2.3	EU-155	OH207-7922-04	11/04/07 21:04	0.028	0.059	0.059	0.099
DOE 4.5.2.3	TL-208	OH207-7922-04	11/04/07 21:04	0.324	0.050	0.060	0.027
DOE 4.5.2.3	PO-209	OH207-7922-04	11/04/07 21:04	1.01	2.77	2.77	4.97
DOE 4.5.2.3	BI-211	OH207-7922-04	11/04/07 21:04	0.150	0.436	0.436	0.687
DOE 4.5.2.3	BI-212	OH207-7922-04	11/04/07 21:04	0.757	0.256	0.267	0.188
DOE 4.5.2.3	PB-212	OH207-7922-04	11/04/07 21:04	1.01	0.092	0.137	0.042
DOE 4.5.2.3	BI-214	OH207-7922-04	11/04/07 21:04	0.806	0.113	0.139	0.048
DOE 4.5.2.3	PB-214	OH207-7922-04	11/04/07 21:04	0.794	0.089	0.119	0.052
DOE 4.5.2.3	RA-223	OH207-7922-04	11/04/07 21:04	0.331	0.098	0.103	0.132
DOE 4.5.2.3	AC-228	OH207-7922-04	11/04/07 21:04	1.18	0.165	0.203	0.088
DOE 4.5.2.3	PA-233	OH207-7922-04	11/04/07 21:04	0.002	0.028	0.028	0.048
DOE 4.5.2.3	PA-234M	OH207-7922-04	11/04/07 21:04	1.90	1.69	1.70	3.20
DOE 4.5.2.3	TH-234	OH207-7922-04	11/04/07 21:04	1.50	0.405	0.432	0.556
DOE 4.5.2.3	U-235	OH207-7922-04	11/04/07 21:04	0.078	0.105	0.105	0.175
DOE 4.5.2.3	NP-236	OH207-7922-04	11/04/07 21:04	0.056	0.036	0.037	0.057
DOE 4.5.2.3	NP-237	OH207-7922-04	11/04/07 21:04	0.608	0.176	0.187	0.199
DOE 4.5.2.3	NP-239	OH207-7922-04	11/04/07 21:04	0.010	0.099	0.099	0.172
DOE 4.5.2.3	AM-241	OH207-7922-04	11/04/07 21:04	0.016	0.084	0.084	0.144
DOE 4.5.2.3	AM-243	OH207-7922-04	11/04/07 21:04	0.200	0.057	0.061	0.048
DOE 4.5.2.3	CM-243	OH207-7922-04	11/04/07 21:04	0.060	0.053	0.053	0.091
DOE 4.5.2.3	AM-246	OH207-7922-04	11/04/07 21:04	0.003	0.047	0.047	0.083
DOE 4.5.2.3	CF-249	OH207-7922-04	11/04/07 21:04	0.008	0.018	0.018	0.031

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2159-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-05	11/05/07 00:15	3.23	0.398	0.513	0.192
DOE 4.5.2.3	CO-60	OH207-7922-05	11/05/07 00:15	0.007	0.013	0.013	0.021
DOE 4.5.2.3	RH-101	OH207-7922-05	11/05/07 00:15	0.003	0.015	0.015	0.025
DOE 4.5.2.3	SB-125	OH207-7922-05	11/05/07 00:15	0.015	0.038	0.038	0.066
DOE 4.5.2.3	CS-137	OH207-7922-05	11/05/07 00:15	0.071	0.031	0.032	0.024
DOE 4.5.2.3	EU-155	OH207-7922-05	11/05/07 00:15	0.022	0.055	0.055	0.094
DOE 4.5.2.3	TL-208	OH207-7922-05	11/05/07 00:15	0.263	0.044	0.052	0.023
DOE 4.5.2.3	PO-209	OH207-7922-05	11/05/07 00:15	-0.032	2.44	2.44	4.29
DOE 4.5.2.3	BI-211	OH207-7922-05	11/05/07 00:15	0.189	0.407	0.408	0.652
DOE 4.5.2.3	BI-212	OH207-7922-05	11/05/07 00:15	0.631	0.215	0.224	0.156
DOE 4.5.2.3	PB-212	OH207-7922-05	11/05/07 00:15	0.842	0.080	0.116	0.038
DOE 4.5.2.3	BI-214	OH207-7922-05	11/05/07 00:15	0.802	0.113	0.138	0.046
DOE 4.5.2.3	PB-214	OH207-7922-05	11/05/07 00:15	0.906	0.098	0.134	0.047
DOE 4.5.2.3	RA-223	OH207-7922-05	11/05/07 00:15	0.167	0.098	0.099	0.122
DOE 4.5.2.3	AC-228	OH207-7922-05	11/05/07 00:15	0.920	0.126	0.156	0.080
DOE 4.5.2.3	PA-233	OH207-7922-05	11/05/07 00:15	-0.002	0.025	0.025	0.043
DOE 4.5.2.3	PA-234M	OH207-7922-05	11/05/07 00:15	0.723	1.58	1.58	2.85
DOE 4.5.2.3	TH-234	OH207-7922-05	11/05/07 00:15	1.06	0.356	0.371	0.522
DOE 4.5.2.3	U-235	OH207-7922-05	11/05/07 00:15	0.005	0.094	0.094	0.156
DOE 4.5.2.3	NP-236	OH207-7922-05	11/05/07 00:15	0.029	0.032	0.032	0.051
DOE 4.5.2.3	NP-237	OH207-7922-05	11/05/07 00:15	0.408	0.174	0.179	0.215
DOE 4.5.2.3	NP-239	OH207-7922-05	11/05/07 00:15	-0.004	0.096	0.096	0.156
DOE 4.5.2.3	AM-241	OH207-7922-05	11/05/07 00:15	0.012	0.084	0.084	0.146
DOE 4.5.2.3	AM-243	OH207-7922-05	11/05/07 00:15	0.184	0.054	0.057	0.045
DOE 4.5.2.3	CM-243	OH207-7922-05	11/05/07 00:15	0.019	0.050	0.050	0.085
DOE 4.5.2.3	AM-246	OH207-7922-05	11/05/07 00:15	0.020	0.043	0.043	0.078
DOE 4.5.2.3	CF-249	OH207-7922-05	11/05/07 00:15	0.016	0.016	0.017	0.029

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2160-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-06	11/05/07 00:16	6.08	0.617	0.867	0.199
DOE 4.5.2.3	CO-60	OH207-7922-06	11/05/07 00:16	0.007	0.013	0.013	0.024
DOE 4.5.2.3	RH-101	OH207-7922-06	11/05/07 00:16	-0.012	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7922-06	11/05/07 00:16	-0.012	0.040	0.040	0.067
DOE 4.5.2.3	CS-137	OH207-7922-06	11/05/07 00:16	0.003	0.018	0.018	0.031
DOE 4.5.2.3	EU-155	OH207-7922-06	11/05/07 00:16	0.081	0.059	0.059	0.101
DOE 4.5.2.3	TL-208	OH207-7922-06	11/05/07 00:16	0.354	0.054	0.065	0.025
DOE 4.5.2.3	PO-209	OH207-7922-06	11/05/07 00:16	3.27	2.90	2.91	5.32
DOE 4.5.2.3	BI-211	OH207-7922-06	11/05/07 00:16	-0.064	0.446	0.446	0.765
DOE 4.5.2.3	BI-212	OH207-7922-06	11/05/07 00:16	0.668	0.216	0.226	0.194
DOE 4.5.2.3	PB-212	OH207-7922-06	11/05/07 00:16	1.04	0.095	0.141	0.043
DOE 4.5.2.3	BI-214	OH207-7922-06	11/05/07 00:16	0.862	0.118	0.146	0.048
DOE 4.5.2.3	PB-214	OH207-7922-06	11/05/07 00:16	0.798	0.090	0.120	0.050
DOE 4.5.2.3	RA-223	OH207-7922-06	11/05/07 00:16	0.364	0.146	0.151	0.131
DOE 4.5.2.3	AC-228	OH207-7922-06	11/05/07 00:16	1.14	0.158	0.195	0.083
DOE 4.5.2.3	PA-233	OH207-7922-06	11/05/07 00:16	-0.006	0.027	0.027	0.046
DOE 4.5.2.3	PA-234M	OH207-7922-06	11/05/07 00:16	1.22	1.67	1.68	3.07
DOE 4.5.2.3	TH-234	OH207-7922-06	11/05/07 00:16	1.53	0.410	0.438	0.430
DOE 4.5.2.3	U-235	OH207-7922-06	11/05/07 00:16	0.040	0.103	0.103	0.170
DOE 4.5.2.3	NP-236	OH207-7922-06	11/05/07 00:16	0.023	0.034	0.034	0.057
DOE 4.5.2.3	NP-237	OH207-7922-06	11/05/07 00:16	0.489	0.169	0.176	0.225
DOE 4.5.2.3	NP-239	OH207-7922-06	11/05/07 00:16	0.011	0.098	0.098	0.170
DOE 4.5.2.3	AM-241	OH207-7922-06	11/05/07 00:16	0.037	0.091	0.091	0.140
DOE 4.5.2.3	AM-243	OH207-7922-06	11/05/07 00:16	0.203	0.055	0.059	0.050
DOE 4.5.2.3	CM-243	OH207-7922-06	11/05/07 00:16	0.002	0.053	0.053	0.088
DOE 4.5.2.3	AM-246	OH207-7922-06	11/05/07 00:16	0.016	0.051	0.051	0.090
DOE 4.5.2.3	CF-249	OH207-7922-06	11/05/07 00:16	0.007	0.017	0.017	0.030

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2161-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-07	11/05/07 00:17	3.98	0.566	0.691	0.308
DOE 4.5.2.3	CO-60	OH207-7922-07	11/05/07 00:17	0.016	0.018	0.018	0.030
DOE 4.5.2.3	RH-101	OH207-7922-07	11/05/07 00:17	-0.011	0.019	0.019	0.031
DOE 4.5.2.3	SB-125	OH207-7922-07	11/05/07 00:17	0.002	0.048	0.048	0.084
DOE 4.5.2.3	CS-137	OH207-7922-07	11/05/07 00:17	0.004	0.020	0.020	0.035
DOE 4.5.2.3	EU-155	OH207-7922-07	11/05/07 00:17	0.008	0.055	0.055	0.094
DOE 4.5.2.3	TL-208	OH207-7922-07	11/05/07 00:17	0.385	0.053	0.065	0.030
DOE 4.5.2.3	PO-209	OH207-7922-07	11/05/07 00:17	-2.10	3.43	3.44	5.79
DOE 4.5.2.3	BI-211	OH207-7922-07	11/05/07 00:17	-0.034	0.578	0.578	0.980
DOE 4.5.2.3	BI-212	OH207-7922-07	11/05/07 00:17	1.02	0.346	0.360	0.232
DOE 4.5.2.3	PB-212	OH207-7922-07	11/05/07 00:17	0.984	0.096	0.137	0.052
DOE 4.5.2.3	BI-214	OH207-7922-07	11/05/07 00:17	0.900	0.108	0.141	0.058
DOE 4.5.2.3	PB-214	OH207-7922-07	11/05/07 00:17	0.863	0.110	0.139	0.064
DOE 4.5.2.3	RA-223	OH207-7922-07	11/05/07 00:17	0.708	0.218	0.229	0.166
DOE 4.5.2.3	AC-228	OH207-7922-07	11/05/07 00:17	1.04	0.166	0.195	0.109
DOE 4.5.2.3	PA-233	OH207-7922-07	11/05/07 00:17	-0.010	0.034	0.034	0.057
DOE 4.5.2.3	PA-234M	OH207-7922-07	11/05/07 00:17	1.27	2.18	2.18	3.98
DOE 4.5.2.3	TH-234	OH207-7922-07	11/05/07 00:17	1.57	0.397	0.427	0.361
DOE 4.5.2.3	U-235	OH207-7922-07	11/05/07 00:17	0.019	0.115	0.115	0.197
DOE 4.5.2.3	NP-236	OH207-7922-07	11/05/07 00:17	0.027	0.035	0.035	0.052
DOE 4.5.2.3	NP-237	OH207-7922-07	11/05/07 00:17	0.579	0.146	0.157	0.157
DOE 4.5.2.3	NP-239	OH207-7922-07	11/05/07 00:17	0.079	0.123	0.123	0.211
DOE 4.5.2.3	AM-241	OH207-7922-07	11/05/07 00:17	0.023	0.039	0.039	0.057
DOE 4.5.2.3	AM-243	OH207-7922-07	11/05/07 00:17	0.177	0.046	0.049	0.032
DOE 4.5.2.3	CM-243	OH207-7922-07	11/05/07 00:17	0.008	0.050	0.050	0.086
DOE 4.5.2.3	AM-246	OH207-7922-07	11/05/07 00:17	0.039	0.060	0.060	0.111
DOE 4.5.2.3	CF-249	OH207-7922-07	11/05/07 00:17	-0.012	0.021	0.021	0.036

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2162-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-08	11/05/07 10:49	4.26	0.470	0.635	0.210
DOE 4.5.2.3	CO-60	OH207-7922-08	11/05/07 10:49	0.010	0.014	0.014	0.019
DOE 4.5.2.3	RH-101	OH207-7922-08	11/05/07 10:49	0.003	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7922-08	11/05/07 10:49	-0.004	0.038	0.038	0.065
DOE 4.5.2.3	CS-137	OH207-7922-08	11/05/07 10:49	0.076	0.027	0.028	0.031
DOE 4.5.2.3	EU-155	OH207-7922-08	11/05/07 10:49	0.050	0.054	0.055	0.095
DOE 4.5.2.3	TL-208	OH207-7922-08	11/05/07 10:49	0.307	0.045	0.055	0.026
DOE 4.5.2.3	PO-209	OH207-7922-08	11/05/07 10:49	-2.59	2.75	2.76	4.39
DOE 4.5.2.3	BI-211	OH207-7922-08	11/05/07 10:49	-0.105	0.407	0.407	0.702
DOE 4.5.2.3	BI-212	OH207-7922-08	11/05/07 10:49	0.511	0.208	0.214	0.191
DOE 4.5.2.3	PB-212	OH207-7922-08	11/05/07 10:49	0.933	0.087	0.128	0.042
DOE 4.5.2.3	BI-214	OH207-7922-08	11/05/07 10:49	0.757	0.102	0.127	0.046
DOE 4.5.2.3	PB-214	OH207-7922-08	11/05/07 10:49	0.866	0.100	0.132	0.048
DOE 4.5.2.3	RA-223	OH207-7922-08	11/05/07 10:49	0.107	0.096	0.096	0.128
DOE 4.5.2.3	AC-228	OH207-7922-08	11/05/07 10:49	1.02	0.138	0.172	0.091
DOE 4.5.2.3	PA-233	OH207-7922-08	11/05/07 10:49	-0.001	0.027	0.027	0.046
DOE 4.5.2.3	PA-234M	OH207-7922-08	11/05/07 10:49	1.16	1.64	1.64	3.01
DOE 4.5.2.3	TH-234	OH207-7922-08	11/05/07 10:49	1.29	0.430	0.449	0.571
DOE 4.5.2.3	U-235	OH207-7922-08	11/05/07 10:49	0.132	0.099	0.100	0.171
DOE 4.5.2.3	NP-236	OH207-7922-08	11/05/07 10:49	0.029	0.033	0.033	0.057
DOE 4.5.2.3	NP-237	OH207-7922-08	11/05/07 10:49	0.518	0.181	0.188	0.206
DOE 4.5.2.3	NP-239	OH207-7922-08	11/05/07 10:49	0.021	0.104	0.104	0.170
DOE 4.5.2.3	AM-241	OH207-7922-08	11/05/07 10:49	-0.007	0.092	0.092	0.160
DOE 4.5.2.3	AM-243	OH207-7922-08	11/05/07 10:49	0.203	0.061	0.065	0.051
DOE 4.5.2.3	CM-243	OH207-7922-08	11/05/07 10:49	-0.047	0.050	0.050	0.081
DOE 4.5.2.3	AM-246	OH207-7922-08	11/05/07 10:49	-0.032	0.046	0.046	0.075
DOE 4.5.2.3	CF-249	OH207-7922-08	11/05/07 10:49	0.002	0.017	0.017	0.029

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2163-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-09	11/05/07 10:50	4.52	0.509	0.681	0.198
DOE 4.5.2.3	CO-60	OH207-7922-09	11/05/07 10:50	0.006	0.014	0.014	0.018
DOE 4.5.2.3	RH-101	OH207-7922-09	11/05/07 10:50	0.003	0.016	0.016	0.025
DOE 4.5.2.3	SB-125	OH207-7922-09	11/05/07 10:50	0.019	0.038	0.038	0.065
DOE 4.5.2.3	CS-137	OH207-7922-09	11/05/07 10:50	0.115	0.030	0.032	0.027
DOE 4.5.2.3	EU-155	OH207-7922-09	11/05/07 10:50	0.038	0.054	0.054	0.092
DOE 4.5.2.3	TL-208	OH207-7922-09	11/05/07 10:50	0.290	0.048	0.056	0.024
DOE 4.5.2.3	PO-209	OH207-7922-09	11/05/07 10:50	-1.17	2.58	2.59	4.33
DOE 4.5.2.3	BI-211	OH207-7922-09	11/05/07 10:50	-0.327	0.424	0.425	0.696
DOE 4.5.2.3	BI-212	OH207-7922-09	11/05/07 10:50	0.519	0.188	0.195	0.172
DOE 4.5.2.3	PB-212	OH207-7922-09	11/05/07 10:50	0.845	0.080	0.116	0.040
DOE 4.5.2.3	BI-214	OH207-7922-09	11/05/07 10:50	0.849	0.113	0.141	0.045
DOE 4.5.2.3	PB-214	OH207-7922-09	11/05/07 10:50	0.811	0.088	0.120	0.048
DOE 4.5.2.3	RA-223	OH207-7922-09	11/05/07 10:50	0.238	0.121	0.123	0.127
DOE 4.5.2.3	AC-228	OH207-7922-09	11/05/07 10:50	1.07	0.153	0.187	0.085
DOE 4.5.2.3	PA-233	OH207-7922-09	11/05/07 10:50	-0.010	0.025	0.025	0.043
DOE 4.5.2.3	PA-234M	OH207-7922-09	11/05/07 10:50	0.334	1.61	1.61	2.85
DOE 4.5.2.3	TH-234	OH207-7922-09	11/05/07 10:50	0.723	0.337	0.345	0.518
DOE 4.5.2.3	U-235	OH207-7922-09	11/05/07 10:50	0.010	0.097	0.097	0.158
DOE 4.5.2.3	NP-236	OH207-7922-09	11/05/07 10:50	0.010	0.032	0.032	0.051
DOE 4.5.2.3	NP-237	OH207-7922-09	11/05/07 10:50	0.431	0.171	0.176	0.217
DOE 4.5.2.3	NP-239	OH207-7922-09	11/05/07 10:50	-0.008	0.095	0.095	0.164
DOE 4.5.2.3	AM-241	OH207-7922-09	11/05/07 10:50	0.061	0.079	0.079	0.137
DOE 4.5.2.3	AM-243	OH207-7922-09	11/05/07 10:50	0.194	0.052	0.055	0.046
DOE 4.5.2.3	CM-243	OH207-7922-09	11/05/07 10:50	0.009	0.049	0.049	0.082
DOE 4.5.2.3	AM-246	OH207-7922-09	11/05/07 10:50	-0.026	0.050	0.050	0.082
DOE 4.5.2.3	CF-249	OH207-7922-09	11/05/07 10:50	0.015	0.017	0.017	0.029

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2164-SD
Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-10	11/05/07 10:52	5.35	0.593	0.799	0.240
DOE 4.5.2.3	CO-60	OH207-7922-10	11/05/07 10:52	0.008	0.019	0.019	0.031
DOE 4.5.2.3	RH-101	OH207-7922-10	11/05/07 10:52	8.0e-04	0.019	0.019	0.031
DOE 4.5.2.3	SB-125	OH207-7922-10	11/05/07 10:52	0.027	0.048	0.048	0.086
DOE 4.5.2.3	CS-137	OH207-7922-10	11/05/07 10:52	0.026	0.021	0.021	0.039
DOE 4.5.2.3	EU-155	OH207-7922-10	11/05/07 10:52	0.063	0.055	0.056	0.097
DOE 4.5.2.3	TL-208	OH207-7922-10	11/05/07 10:52	0.360	0.053	0.064	0.032
DOE 4.5.2.3	PO-209	OH207-7922-10	11/05/07 10:52	1.54	3.61	3.62	6.61
DOE 4.5.2.3	BI-211	OH207-7922-10	11/05/07 10:52	-0.420	0.563	0.565	0.908
DOE 4.5.2.3	BI-212	OH207-7922-10	11/05/07 10:52	0.487	0.293	0.297	0.241
DOE 4.5.2.3	PB-212	OH207-7922-10	11/05/07 10:52	1.10	0.105	0.152	0.049
DOE 4.5.2.3	BI-214	OH207-7922-10	11/05/07 10:52	0.664	0.103	0.122	0.060
DOE 4.5.2.3	PB-214	OH207-7922-10	11/05/07 10:52	0.721	0.094	0.119	0.061
DOE 4.5.2.3	RA-223	OH207-7922-10	11/05/07 10:52	0.391	0.155	0.160	0.160
DOE 4.5.2.3	AC-228	OH207-7922-10	11/05/07 10:52	1.21	0.185	0.221	0.118
DOE 4.5.2.3	PA-233	OH207-7922-10	11/05/07 10:52	-0.004	0.034	0.034	0.057
DOE 4.5.2.3	PA-234M	OH207-7922-10	11/05/07 10:52	-0.089	2.24	2.24	3.93
DOE 4.5.2.3	TH-234	OH207-7922-10	11/05/07 10:52	1.22	0.360	0.380	0.366
DOE 4.5.2.3	U-235	OH207-7922-10	11/05/07 10:52	0.004	0.118	0.118	0.202
DOE 4.5.2.3	NP-236	OH207-7922-10	11/05/07 10:52	0.045	0.035	0.035	0.051
DOE 4.5.2.3	NP-237	OH207-7922-10	11/05/07 10:52	0.626	0.158	0.170	0.159
DOE 4.5.2.3	NP-239	OH207-7922-10	11/05/07 10:52	0.065	0.124	0.124	0.212
DOE 4.5.2.3	AM-241	OH207-7922-10	11/05/07 10:52	0.043	0.038	0.038	0.057
DOE 4.5.2.3	AM-243	OH207-7922-10	11/05/07 10:52	0.178	0.046	0.049	0.032
DOE 4.5.2.3	CM-243	OH207-7922-10	11/05/07 10:52	0.022	0.050	0.050	0.086
DOE 4.5.2.3	AM-246	OH207-7922-10	11/05/07 10:52	0.017	0.066	0.066	0.118
DOE 4.5.2.3	CF-249	OH207-7922-10	11/05/07 10:52	-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-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2165-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-11	11/05/07 13:53	4.48	0.476	0.654	0.176
DOE 4.5.2.3	CO-60	OH207-7922-11	11/05/07 13:53	0.008	0.013	0.013	0.021
DOE 4.5.2.3	RH-101	OH207-7922-11	11/05/07 13:53	0.016	0.014	0.014	0.024
DOE 4.5.2.3	SB-125	OH207-7922-11	11/05/07 13:53	0.013	0.036	0.036	0.062
DOE 4.5.2.3	CS-137	OH207-7922-11	11/05/07 13:53	0.025	0.015	0.015	0.022
DOE 4.5.2.3	EU-155	OH207-7922-11	11/05/07 13:53	0.035	0.051	0.051	0.087
DOE 4.5.2.3	TL-208	OH207-7922-11	11/05/07 13:53	0.285	0.041	0.050	0.022
DOE 4.5.2.3	PO-209	OH207-7922-11	11/05/07 13:53	-0.377	2.51	2.51	4.34
DOE 4.5.2.3	BI-211	OH207-7922-11	11/05/07 13:53	-0.278	0.355	0.356	0.587
DOE 4.5.2.3	BI-212	OH207-7922-11	11/05/07 13:53	0.633	0.198	0.208	0.167
DOE 4.5.2.3	PB-212	OH207-7922-11	11/05/07 13:53	0.811	0.076	0.111	0.037
DOE 4.5.2.3	BI-214	OH207-7922-11	11/05/07 13:53	0.671	0.094	0.116	0.042
DOE 4.5.2.3	PB-214	OH207-7922-11	11/05/07 13:53	0.725	0.082	0.110	0.044
DOE 4.5.2.3	RA-223	OH207-7922-11	11/05/07 13:53	0.366	0.129	0.134	0.118
DOE 4.5.2.3	AC-228	OH207-7922-11	11/05/07 13:53	0.892	0.145	0.170	0.079
DOE 4.5.2.3	PA-233	OH207-7922-11	11/05/07 13:53	0.008	0.024	0.024	0.042
DOE 4.5.2.3	PA-234M	OH207-7922-11	11/05/07 13:53	0.863	1.56	1.56	2.81
DOE 4.5.2.3	TH-234	OH207-7922-11	11/05/07 13:53	1.03	0.396	0.409	0.521
DOE 4.5.2.3	U-235	OH207-7922-11	11/05/07 13:53	0.119	0.093	0.093	0.158
DOE 4.5.2.3	NP-236	OH207-7922-11	11/05/07 13:53	0.020	0.030	0.030	0.052
DOE 4.5.2.3	NP-237	OH207-7922-11	11/05/07 13:53	0.368	0.164	0.168	0.179
DOE 4.5.2.3	NP-239	OH207-7922-11	11/05/07 13:53	-0.043	0.093	0.093	0.148
DOE 4.5.2.3	AM-241	OH207-7922-11	11/05/07 13:53	-0.023	0.082	0.082	0.141
DOE 4.5.2.3	AM-243	OH207-7922-11	11/05/07 13:53	0.129	0.041	0.043	0.046
DOE 4.5.2.3	CM-243	OH207-7922-11	11/05/07 13:53	-0.011	0.046	0.046	0.077
DOE 4.5.2.3	AM-246	OH207-7922-11	11/05/07 13:53	0.012	0.045	0.045	0.080
DOE 4.5.2.3	CF-249	OH207-7922-11	11/05/07 13:53	0.008	0.015	0.015	0.027

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2166-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-12	11/05/07 13:54	5.42	0.578	0.793	0.174
DOE 4.5.2.3	CO-60	OH207-7922-12	11/05/07 13:54	-0.006	0.015	0.015	0.025
DOE 4.5.2.3	RH-101	OH207-7922-12	11/05/07 13:54	4.5e-04	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7922-12	11/05/07 13:54	0.009	0.039	0.039	0.068
DOE 4.5.2.3	CS-137	OH207-7922-12	11/05/07 13:54	-0.007	0.016	0.016	0.027
DOE 4.5.2.3	EU-155	OH207-7922-12	11/05/07 13:54	0.030	0.058	0.058	0.098
DOE 4.5.2.3	TL-208	OH207-7922-12	11/05/07 13:54	0.398	0.056	0.068	0.025
DOE 4.5.2.3	PO-209	OH207-7922-12	11/05/07 13:54	-1.87	3.08	3.09	5.07
DOE 4.5.2.3	BI-211	OH207-7922-12	11/05/07 13:54	-0.109	0.490	0.490	0.722
DOE 4.5.2.3	BI-212	OH207-7922-12	11/05/07 13:54	0.719	0.201	0.214	0.198
DOE 4.5.2.3	PB-212	OH207-7922-12	11/05/07 13:54	1.08	0.098	0.145	0.041
DOE 4.5.2.3	BI-214	OH207-7922-12	11/05/07 13:54	0.615	0.093	0.111	0.052
DOE 4.5.2.3	PB-214	OH207-7922-12	11/05/07 13:54	0.630	0.083	0.104	0.049
DOE 4.5.2.3	RA-223	OH207-7922-12	11/05/07 13:54	0.525	0.162	0.170	0.126
DOE 4.5.2.3	AC-228	OH207-7922-12	11/05/07 13:54	1.33	0.191	0.232	0.091
DOE 4.5.2.3	PA-233	OH207-7922-12	11/05/07 13:54	0.013	0.027	0.027	0.048
DOE 4.5.2.3	PA-234M	OH207-7922-12	11/05/07 13:54	0.315	1.59	1.59	2.84
DOE 4.5.2.3	TH-234	OH207-7922-12	11/05/07 13:54	0.844	0.417	0.425	0.567
DOE 4.5.2.3	U-235	OH207-7922-12	11/05/07 13:54	0.037	0.107	0.107	0.176
DOE 4.5.2.3	NP-236	OH207-7922-12	11/05/07 13:54	-0.025	0.035	0.035	0.057
DOE 4.5.2.3	NP-237	OH207-7922-12	11/05/07 13:54	0.507	0.185	0.192	0.216
DOE 4.5.2.3	NP-239	OH207-7922-12	11/05/07 13:54	-0.063	0.099	0.099	0.168
DOE 4.5.2.3	AM-241	OH207-7922-12	11/05/07 13:54	-0.017	0.088	0.088	0.149
DOE 4.5.2.3	AM-243	OH207-7922-12	11/05/07 13:54	0.218	0.060	0.064	0.050
DOE 4.5.2.3	CM-243	OH207-7922-12	11/05/07 13:54	0.061	0.052	0.052	0.089
DOE 4.5.2.3	AM-246	OH207-7922-12	11/05/07 13:54	-0.021	0.052	0.052	0.086
DOE 4.5.2.3	CF-249	OH207-7922-12	11/05/07 13:54	0.020	0.017	0.017	0.031

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2167-SD
Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-13	11/05/07 13:56	4.11	0.499	0.647	0.214
DOE 4.5.2.3	CO-60	OH207-7922-13	11/05/07 13:56	0.006	0.016	0.016	0.028
DOE 4.5.2.3	RH-101	OH207-7922-13	11/05/07 13:56	-0.008	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7922-13	11/05/07 13:56	0.022	0.044	0.044	0.077
DOE 4.5.2.3	CS-137	OH207-7922-13	11/05/07 13:56	0.044	0.023	0.024	0.033
DOE 4.5.2.3	EU-155	OH207-7922-13	11/05/07 13:56	0.016	0.048	0.048	0.084
DOE 4.5.2.3	TL-208	OH207-7922-13	11/05/07 13:56	0.326	0.043	0.054	0.027
DOE 4.5.2.3	PO-209	OH207-7922-13	11/05/07 13:56	1.21	3.28	3.28	5.91
DOE 4.5.2.3	BI-211	OH207-7922-13	11/05/07 13:56	0.087	0.509	0.509	0.873
DOE 4.5.2.3	BI-212	OH207-7922-13	11/05/07 13:56	0.752	0.247	0.258	0.193
DOE 4.5.2.3	PB-212	OH207-7922-13	11/05/07 13:56	0.923	0.087	0.127	0.047
DOE 4.5.2.3	BI-214	OH207-7922-13	11/05/07 13:56	0.764	0.096	0.122	0.051
DOE 4.5.2.3	PB-214	OH207-7922-13	11/05/07 13:56	0.867	0.104	0.136	0.052
DOE 4.5.2.3	RA-223	OH207-7922-13	11/05/07 13:56	0.372	0.150	0.154	0.142
DOE 4.5.2.3	AC-228	OH207-7922-13	11/05/07 13:56	1.17	0.174	0.210	0.104
DOE 4.5.2.3	PA-233	OH207-7922-13	11/05/07 13:56	0.002	0.030	0.030	0.050
DOE 4.5.2.3	PA-234M	OH207-7922-13	11/05/07 13:56	2.12	2.10	2.11	3.09
DOE 4.5.2.3	TH-234	OH207-7922-13	11/05/07 13:56	1.31	0.322	0.348	0.318
DOE 4.5.2.3	U-235	OH207-7922-13	11/05/07 13:56	0.172	0.105	0.106	0.183
DOE 4.5.2.3	NP-236	OH207-7922-13	11/05/07 13:56	0.029	0.031	0.032	0.046
DOE 4.5.2.3	NP-237	OH207-7922-13	11/05/07 13:56	0.565	0.140	0.151	0.138
DOE 4.5.2.3	NP-239	OH207-7922-13	11/05/07 13:56	0.008	0.108	0.109	0.183
DOE 4.5.2.3	AM-241	OH207-7922-13	11/05/07 13:56	0.007	0.034	0.034	0.049
DOE 4.5.2.3	AM-243	OH207-7922-13	11/05/07 13:56	0.172	0.043	0.046	0.029
DOE 4.5.2.3	CM-243	OH207-7922-13	11/05/07 13:56	0.019	0.044	0.044	0.076
DOE 4.5.2.3	AM-246	OH207-7922-13	11/05/07 13:56	0.028	0.053	0.053	0.097
DOE 4.5.2.3	CF-249	OH207-7922-13	11/05/07 13:56	-0.005	0.018	0.018	0.030

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2168-SD
Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Batch Number: 7922 Laboratory Code: SCA

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	OH207-7922-14	11/05/07 16:56	4.88	0.567	0.749	0.173
DOE 4.5.2.3	CO-60	OH207-7922-14	11/05/07 16:56	-0.007	0.016	0.016	0.027
DOE 4.5.2.3	RH-101	OH207-7922-14	11/05/07 16:56	-0.005	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7922-14	11/05/07 16:56	0.004	0.042	0.042	0.072
DOE 4.5.2.3	CS-137	OH207-7922-14	11/05/07 16:56	0.021	0.017	0.017	0.032
DOE 4.5.2.3	EU-155	OH207-7922-14	11/05/07 16:56	0.096	0.061	0.061	0.107
DOE 4.5.2.3	TL-208	OH207-7922-14	11/05/07 16:56	0.366	0.056	0.067	0.027
DOE 4.5.2.3	PO-209	OH207-7922-14	11/05/07 16:56	2.21	2.93	2.94	5.41
DOE 4.5.2.3	BI-211	OH207-7922-14	11/05/07 16:56	-0.217	0.438	0.439	0.742
DOE 4.5.2.3	BI-212	OH207-7922-14	11/05/07 16:56	0.657	0.220	0.230	0.209
DOE 4.5.2.3	PB-212	OH207-7922-14	11/05/07 16:56	1.15	0.105	0.155	0.045
DOE 4.5.2.3	BI-214	OH207-7922-14	11/05/07 16:56	0.652	0.101	0.121	0.055
DOE 4.5.2.3	PB-214	OH207-7922-14	11/05/07 16:56	0.646	0.084	0.106	0.051
DOE 4.5.2.3	RA-223	OH207-7922-14	11/05/07 16:56	0.466	0.175	0.181	0.137
DOE 4.5.2.3	AC-228	OH207-7922-14	11/05/07 16:56	1.50	0.155	0.216	0.083
DOE 4.5.2.3	PA-233	OH207-7922-14	11/05/07 16:56	0.019	0.028	0.028	0.050
DOE 4.5.2.3	PA-234M	OH207-7922-14	11/05/07 16:56	0.123	1.79	1.79	3.15
DOE 4.5.2.3	TH-234	OH207-7922-14	11/05/07 16:56	1.38	0.367	0.392	0.625
DOE 4.5.2.3	U-235	OH207-7922-14	11/05/07 16:56	0.058	0.104	0.105	0.176
DOE 4.5.2.3	NP-236	OH207-7922-14	11/05/07 16:56	0.013	0.039	0.039	0.060
DOE 4.5.2.3	NP-237	OH207-7922-14	11/05/07 16:56	0.717	0.212	0.224	0.219
DOE 4.5.2.3	NP-239	OH207-7922-14	11/05/07 16:56	0.039	0.112	0.112	0.184
DOE 4.5.2.3	AM-241	OH207-7922-14	11/05/07 16:56	0.002	0.112	0.112	0.175
DOE 4.5.2.3	AM-243	OH207-7922-14	11/05/07 16:56	0.226	0.065	0.069	0.057
DOE 4.5.2.3	CM-243	OH207-7922-14	11/05/07 16:56	-0.032	0.055	0.055	0.091
DOE 4.5.2.3	AM-246	OH207-7922-14	11/05/07 16:56	-0.012	0.054	0.054	0.092
DOE 4.5.2.3	CF-249	OH207-7922-14	11/05/07 16:56	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-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2169-ST
Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Batch Number: 7923 Laboratory Code: SCA

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	OH207-7923-01	11/05/07 20:00	4.14	0.474	0.629	0.172
DOE 4.5.2.3	CO-60	OH207-7923-01	11/05/07 20:00	-0.004	0.013	0.013	0.022
DOE 4.5.2.3	RH-101	OH207-7923-01	11/05/07 20:00	-0.011	0.015	0.015	0.024
DOE 4.5.2.3	SB-125	OH207-7923-01	11/05/07 20:00	-0.032	0.038	0.038	0.062
DOE 4.5.2.3	CS-137	OH207-7923-01	11/05/07 20:00	0.198	0.037	0.042	0.028
DOE 4.5.2.3	EU-155	OH207-7923-01	11/05/07 20:00	0.083	0.056	0.056	0.097
DOE 4.5.2.3	TL-208	OH207-7923-01	11/05/07 20:00	0.322	0.046	0.056	0.025
DOE 4.5.2.3	PO-209	OH207-7923-01	11/05/07 20:00	0.580	2.68	2.68	4.78
DOE 4.5.2.3	BI-211	OH207-7923-01	11/05/07 20:00	0.016	0.391	0.391	0.690
DOE 4.5.2.3	BI-212	OH207-7923-01	11/05/07 20:00	0.554	0.208	0.216	0.184
DOE 4.5.2.3	PB-212	OH207-7923-01	11/05/07 20:00	0.940	0.088	0.129	0.039
DOE 4.5.2.3	BI-214	OH207-7923-01	11/05/07 20:00	0.681	0.097	0.119	0.048
DOE 4.5.2.3	PB-214	OH207-7923-01	11/05/07 20:00	0.720	0.087	0.113	0.046
DOE 4.5.2.3	RA-223	OH207-7923-01	11/05/07 20:00	0.264	0.104	0.107	0.116
DOE 4.5.2.3	AC-228	OH207-7923-01	11/05/07 20:00	1.06	0.125	0.164	0.075
DOE 4.5.2.3	PA-233	OH207-7923-01	11/05/07 20:00	0.013	0.025	0.025	0.045
DOE 4.5.2.3	PA-234M	OH207-7923-01	11/05/07 20:00	1.54	1.50	1.51	2.85
DOE 4.5.2.3	TH-234	OH207-7923-01	11/05/07 20:00	0.892	0.406	0.416	0.536
DOE 4.5.2.3	U-235	OH207-7923-01	11/05/07 20:00	0.050	0.098	0.098	0.164
DOE 4.5.2.3	NP-236	OH207-7923-01	11/05/07 20:00	0.008	0.033	0.033	0.054
DOE 4.5.2.3	NP-237	OH207-7923-01	11/05/07 20:00	0.380	0.144	0.149	0.228
DOE 4.5.2.3	NP-239	OH207-7923-01	11/05/07 20:00	0.077	0.099	0.099	0.165
DOE 4.5.2.3	AM-241	OH207-7923-01	11/05/07 20:00	-0.032	0.089	0.089	0.152
DOE 4.5.2.3	AM-243	OH207-7923-01	11/05/07 20:00	0.202	0.056	0.060	0.047
DOE 4.5.2.3	CM-243	OH207-7923-01	11/05/07 20:00	0.030	0.050	0.051	0.087
DOE 4.5.2.3	AM-246	OH207-7923-01	11/05/07 20:00	0.017	0.043	0.043	0.078
DOE 4.5.2.3	CF-249	OH207-7923-01	11/05/07 20:00	-0.001	0.017	0.017	0.029

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7923-LC1	SCAQC-7923-LD1		SCAQC-7923-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2170-ST
Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Batch Number: 7923 Laboratory Code: SCA

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	OH207-7923-02	11/05/07 20:01	2.90	0.411	0.503	0.216
DOE 4.5.2.3	CO-60	OH207-7923-02	11/05/07 20:01	-0.004	0.015	0.015	0.026
DOE 4.5.2.3	RH-101	OH207-7923-02	11/05/07 20:01	1.9e-04	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7923-02	11/05/07 20:01	-0.011	0.042	0.042	0.072
DOE 4.5.2.3	CS-137	OH207-7923-02	11/05/07 20:01	0.132	0.035	0.038	0.029
DOE 4.5.2.3	EU-155	OH207-7923-02	11/05/07 20:01	0.052	0.049	0.049	0.086
DOE 4.5.2.3	TL-208	OH207-7923-02	11/05/07 20:01	0.280	0.042	0.050	0.028
DOE 4.5.2.3	PO-209	OH207-7923-02	11/05/07 20:01	-1.64	3.02	3.02	5.14
DOE 4.5.2.3	BI-211	OH207-7923-02	11/05/07 20:01	-0.129	0.460	0.460	0.773
DOE 4.5.2.3	BI-212	OH207-7923-02	11/05/07 20:01	0.696	0.226	0.236	0.228
DOE 4.5.2.3	PB-212	OH207-7923-02	11/05/07 20:01	0.855	0.083	0.119	0.046
DOE 4.5.2.3	BI-214	OH207-7923-02	11/05/07 20:01	0.559	0.087	0.103	0.052
DOE 4.5.2.3	PB-214	OH207-7923-02	11/05/07 20:01	0.606	0.085	0.105	0.055
DOE 4.5.2.3	RA-223	OH207-7923-02	11/05/07 20:01	0.312	0.138	0.142	0.138
DOE 4.5.2.3	AC-228	OH207-7923-02	11/05/07 20:01	0.902	0.168	0.191	0.098
DOE 4.5.2.3	PA-233	OH207-7923-02	11/05/07 20:01	-0.012	0.029	0.029	0.048
DOE 4.5.2.3	PA-234M	OH207-7923-02	11/05/07 20:01	1.67	1.97	1.98	3.69
DOE 4.5.2.3	TH-234	OH207-7923-02	11/05/07 20:01	1.23	0.361	0.381	0.324
DOE 4.5.2.3	U-235	OH207-7923-02	11/05/07 20:01	0.053	0.101	0.101	0.175
DOE 4.5.2.3	NP-236	OH207-7923-02	11/05/07 20:01	0.029	0.031	0.031	0.046
DOE 4.5.2.3	NP-237	OH207-7923-02	11/05/07 20:01	0.549	0.138	0.148	0.141
DOE 4.5.2.3	NP-239	OH207-7923-02	11/05/07 20:01	0.023	0.106	0.106	0.181
DOE 4.5.2.3	AM-241	OH207-7923-02	11/05/07 20:01	0.031	0.034	0.034	0.051
DOE 4.5.2.3	AM-243	OH207-7923-02	11/05/07 20:01	0.135	0.040	0.042	0.029
DOE 4.5.2.3	CM-243	OH207-7923-02	11/05/07 20:01	0.023	0.044	0.044	0.076
DOE 4.5.2.3	AM-246	OH207-7923-02	11/05/07 20:01	-0.010	0.048	0.048	0.084
DOE 4.5.2.3	CF-249	OH207-7923-02	11/05/07 20:01	0.012	0.019	0.019	0.034

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7923-LC1	SCAQC-7923-LD1		SCAQC-7923-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2171-ST
Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Batch Number: 7923 Laboratory Code: SCA

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	OH207-7923-03	11/06/07 00:04	2.02	0.402	0.450	0.242
DOE 4.5.2.3	CO-60	OH207-7923-03	11/06/07 00:04	0.006	0.017	0.017	0.030
DOE 4.5.2.3	RH-101	OH207-7923-03	11/06/07 00:04	-0.002	0.017	0.017	0.029
DOE 4.5.2.3	SB-125	OH207-7923-03	11/06/07 00:04	0.038	0.042	0.042	0.078
DOE 4.5.2.3	CS-137	OH207-7923-03	11/06/07 00:04	0.131	0.033	0.035	0.030
DOE 4.5.2.3	EU-155	OH207-7923-03	11/06/07 00:04	0.019	0.062	0.062	0.107
DOE 4.5.2.3	TL-208	OH207-7923-03	11/06/07 00:04	0.283	0.048	0.056	0.033
DOE 4.5.2.3	PO-209	OH207-7923-03	11/06/07 00:04	-0.977	3.46	3.46	5.96
DOE 4.5.2.3	BI-211	OH207-7923-03	11/06/07 00:04	0.343	0.464	0.465	0.877
DOE 4.5.2.3	BI-212	OH207-7923-03	11/06/07 00:04	0.359	0.252	0.255	0.220
DOE 4.5.2.3	PB-212	OH207-7923-03	11/06/07 00:04	0.830	0.085	0.119	0.049
DOE 4.5.2.3	BI-214	OH207-7923-03	11/06/07 00:04	0.448	0.079	0.091	0.051
DOE 4.5.2.3	PB-214	OH207-7923-03	11/06/07 00:04	0.506	0.082	0.096	0.054
DOE 4.5.2.3	RA-223	OH207-7923-03	11/06/07 00:04	0.370	0.180	0.183	0.137
DOE 4.5.2.3	AC-228	OH207-7923-03	11/06/07 00:04	0.860	0.149	0.172	0.098
DOE 4.5.2.3	PA-233	OH207-7923-03	11/06/07 00:04	0.010	0.028	0.028	0.051
DOE 4.5.2.3	PA-234M	OH207-7923-03	11/06/07 00:04	0.882	1.94	1.94	3.58
DOE 4.5.2.3	TH-234	OH207-7923-03	11/06/07 00:04	1.27	0.506	0.522	0.660
DOE 4.5.2.3	U-235	OH207-7923-03	11/06/07 00:04	0.005	0.105	0.105	0.175
DOE 4.5.2.3	NP-236	OH207-7923-03	11/06/07 00:04	0.027	0.035	0.035	0.062
DOE 4.5.2.3	NP-237	OH207-7923-03	11/06/07 00:04	0.376	0.177	0.181	0.258
DOE 4.5.2.3	NP-239	OH207-7923-03	11/06/07 00:04	-0.016	0.112	0.112	0.183
DOE 4.5.2.3	AM-241	OH207-7923-03	11/06/07 00:04	-0.068	0.104	0.104	0.177
DOE 4.5.2.3	AM-243	OH207-7923-03	11/06/07 00:04	0.199	0.064	0.067	0.056
DOE 4.5.2.3	CM-243	OH207-7923-03	11/06/07 00:04	0.013	0.056	0.056	0.096
DOE 4.5.2.3	AM-246	OH207-7923-03	11/06/07 00:04	-6.0e-04	0.052	0.052	0.092
DOE 4.5.2.3	CF-249	OH207-7923-03	11/06/07 00:04	-0.002	0.018	0.018	0.032

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7923-LC1	SCAQC-7923-LD1		SCAQC-7923-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2172-ST

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7923 Laboratory Code: SCA

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	OH207-7923-04	11/06/07 00:09	3.29	0.476	0.579	0.223
DOE 4.5.2.3	CO-60	OH207-7923-04	11/06/07 00:09	-0.012	0.012	0.013	0.021
DOE 4.5.2.3	RH-101	OH207-7923-04	11/06/07 00:09	0.002	0.015	0.015	0.024
DOE 4.5.2.3	SB-125	OH207-7923-04	11/06/07 00:09	0.050	0.039	0.040	0.071
DOE 4.5.2.3	CS-137	OH207-7923-04	11/06/07 00:09	0.078	0.028	0.029	0.029
DOE 4.5.2.3	EU-155	OH207-7923-04	11/06/07 00:09	0.013	0.053	0.053	0.089
DOE 4.5.2.3	TL-208	OH207-7923-04	11/06/07 00:09	0.316	0.049	0.058	0.023
DOE 4.5.2.3	PO-209	OH207-7923-04	11/06/07 00:09	0.215	2.88	2.88	5.05
DOE 4.5.2.3	BI-211	OH207-7923-04	11/06/07 00:09	0.661	0.403	0.409	0.723
DOE 4.5.2.3	BI-212	OH207-7923-04	11/06/07 00:09	0.676	0.192	0.203	0.181
DOE 4.5.2.3	PB-212	OH207-7923-04	11/06/07 00:09	0.898	0.084	0.123	0.041
DOE 4.5.2.3	BI-214	OH207-7923-04	11/06/07 00:09	0.589	0.089	0.106	0.047
DOE 4.5.2.3	PB-214	OH207-7923-04	11/06/07 00:09	0.581	0.079	0.098	0.048
DOE 4.5.2.3	RA-223	OH207-7923-04	11/06/07 00:09	0.308	0.142	0.145	0.128
DOE 4.5.2.3	AC-228	OH207-7923-04	11/06/07 00:09	0.958	0.142	0.172	0.092
DOE 4.5.2.3	PA-233	OH207-7923-04	11/06/07 00:09	0.006	0.026	0.026	0.045
DOE 4.5.2.3	PA-234M	OH207-7923-04	11/06/07 00:09	0.032	1.72	1.72	3.00
DOE 4.5.2.3	TH-234	OH207-7923-04	11/06/07 00:09	1.17	0.412	0.429	0.389
DOE 4.5.2.3	U-235	OH207-7923-04	11/06/07 00:09	0.102	0.098	0.099	0.165
DOE 4.5.2.3	NP-236	OH207-7923-04	11/06/07 00:09	0.014	0.032	0.032	0.053
DOE 4.5.2.3	NP-237	OH207-7923-04	11/06/07 00:09	0.623	0.200	0.209	0.184
DOE 4.5.2.3	NP-239	OH207-7923-04	11/06/07 00:09	-0.060	0.091	0.092	0.155
DOE 4.5.2.3	AM-241	OH207-7923-04	11/06/07 00:09	0.039	0.090	0.091	0.141
DOE 4.5.2.3	AM-243	OH207-7923-04	11/06/07 00:09	0.190	0.052	0.055	0.044
DOE 4.5.2.3	CM-243	OH207-7923-04	11/06/07 00:09	-0.029	0.048	0.048	0.079
DOE 4.5.2.3	AM-246	OH207-7923-04	11/06/07 00:09	0.005	0.047	0.047	0.083
DOE 4.5.2.3	CF-249	OH207-7923-04	11/06/07 00:09	0.012	0.017	0.017	0.029

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7923-LC1	SCAQC-7923-LD1		SCAQC-7923-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2169-SD
Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Batch Number: 7924 Laboratory Code: SCA

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	OH207-7924-01	11/06/07 08:36	3.49	0.477	0.591	0.212
DOE 4.5.2.3	CO-60	OH207-7924-01	11/06/07 08:36	0.002	0.013	0.013	0.023
DOE 4.5.2.3	RH-101	OH207-7924-01	11/06/07 08:36	-0.011	0.016	0.016	0.025
DOE 4.5.2.3	SB-125	OH207-7924-01	11/06/07 08:36	0.008	0.038	0.038	0.065
DOE 4.5.2.3	CS-137	OH207-7924-01	11/06/07 08:36	0.060	0.027	0.028	0.029
DOE 4.5.2.3	EU-155	OH207-7924-01	11/06/07 08:36	0.066	0.058	0.058	0.099
DOE 4.5.2.3	TL-208	OH207-7924-01	11/06/07 08:36	0.336	0.049	0.060	0.027
DOE 4.5.2.3	PO-209	OH207-7924-01	11/06/07 08:36	-1.78	2.80	2.81	4.61
DOE 4.5.2.3	BI-211	OH207-7924-01	11/06/07 08:36	-0.098	0.473	0.473	0.700
DOE 4.5.2.3	BI-212	OH207-7924-01	11/06/07 08:36	0.648	0.208	0.218	0.212
DOE 4.5.2.3	PB-212	OH207-7924-01	11/06/07 08:36	0.985	0.091	0.134	0.043
DOE 4.5.2.3	BI-214	OH207-7924-01	11/06/07 08:36	0.530	0.092	0.106	0.048
DOE 4.5.2.3	PB-214	OH207-7924-01	11/06/07 08:36	0.520	0.076	0.092	0.048
DOE 4.5.2.3	RA-223	OH207-7924-01	11/06/07 08:36	0.369	0.105	0.111	0.127
DOE 4.5.2.3	AC-228	OH207-7924-01	11/06/07 08:36	1.21	0.167	0.206	0.084
DOE 4.5.2.3	PA-233	OH207-7924-01	11/06/07 08:36	0.020	0.027	0.027	0.048
DOE 4.5.2.3	PA-234M	OH207-7924-01	11/06/07 08:36	1.25	1.60	1.61	3.01
DOE 4.5.2.3	TH-234	OH207-7924-01	11/06/07 08:36	1.19	0.381	0.399	0.423
DOE 4.5.2.3	U-235	OH207-7924-01	11/06/07 08:36	0.032	0.098	0.098	0.162
DOE 4.5.2.3	NP-236	OH207-7924-01	11/06/07 08:36	0.052	0.036	0.036	0.056
DOE 4.5.2.3	NP-237	OH207-7924-01	11/06/07 08:36	0.472	0.177	0.183	0.200
DOE 4.5.2.3	NP-239	OH207-7924-01	11/06/07 08:36	-0.018	0.097	0.097	0.168
DOE 4.5.2.3	AM-241	OH207-7924-01	11/06/07 08:36	0.055	0.094	0.094	0.147
DOE 4.5.2.3	AM-243	OH207-7924-01	11/06/07 08:36	0.189	0.056	0.059	0.049
DOE 4.5.2.3	CM-243	OH207-7924-01	11/06/07 08:36	0.030	0.051	0.052	0.087
DOE 4.5.2.3	AM-246	OH207-7924-01	11/06/07 08:36	0.029	0.046	0.046	0.086
DOE 4.5.2.3	CF-249	OH207-7924-01	11/06/07 08:36	0.002	0.017	0.017	0.029

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7924-LC1	SCAQC-7924-LD1		SCAQC-7924-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2170-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7924 Laboratory Code: SCA

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	OH207-7924-02	11/06/07 03:32	2.64	0.375	0.459	0.255
DOE 4.5.2.3	CO-60	OH207-7924-02	11/06/07 03:32	0.013	0.017	0.017	0.025
DOE 4.5.2.3	RH-101	OH207-7924-02	11/06/07 03:32	-0.006	0.018	0.018	0.029
DOE 4.5.2.3	SB-125	OH207-7924-02	11/06/07 03:32	0.002	0.043	0.043	0.075
DOE 4.5.2.3	CS-137	OH207-7924-02	11/06/07 03:32	0.206	0.038	0.043	0.031
DOE 4.5.2.3	EU-155	OH207-7924-02	11/06/07 03:32	0.038	0.049	0.049	0.086
DOE 4.5.2.3	TL-208	OH207-7924-02	11/06/07 03:32	0.280	0.047	0.055	0.026
DOE 4.5.2.3	PO-209	OH207-7924-02	11/06/07 03:32	-4.56	3.22	3.25	4.87
DOE 4.5.2.3	BI-211	OH207-7924-02	11/06/07 03:32	-0.522	0.509	0.512	0.800
DOE 4.5.2.3	BI-212	OH207-7924-02	11/06/07 03:32	0.578	0.246	0.253	0.216
DOE 4.5.2.3	PB-212	OH207-7924-02	11/06/07 03:32	0.815	0.083	0.117	0.047
DOE 4.5.2.3	BI-214	OH207-7924-02	11/06/07 03:32	0.575	0.089	0.106	0.054
DOE 4.5.2.3	PB-214	OH207-7924-02	11/06/07 03:32	0.575	0.081	0.099	0.057
DOE 4.5.2.3	RA-223	OH207-7924-02	11/06/07 03:32	0.294	0.121	0.124	0.142
DOE 4.5.2.3	AC-228	OH207-7924-02	11/06/07 03:32	0.958	0.152	0.180	0.100
DOE 4.5.2.3	PA-233	OH207-7924-02	11/06/07 03:32	0.003	0.032	0.032	0.053
DOE 4.5.2.3	PA-234M	OH207-7924-02	11/06/07 03:32	0.450	1.83	1.83	3.32
DOE 4.5.2.3	TH-234	OH207-7924-02	11/06/07 03:32	0.816	0.335	0.345	0.341
DOE 4.5.2.3	U-235	OH207-7924-02	11/06/07 03:32	0.039	0.102	0.102	0.177
DOE 4.5.2.3	NP-236	OH207-7924-02	11/06/07 03:32	0.031	0.030	0.030	0.048
DOE 4.5.2.3	NP-237	OH207-7924-02	11/06/07 03:32	0.329	0.164	0.168	0.165
DOE 4.5.2.3	NP-239	OH207-7924-02	11/06/07 03:32	0.022	0.115	0.115	0.195
DOE 4.5.2.3	AM-241	OH207-7924-02	11/06/07 03:32	0.025	0.037	0.037	0.055
DOE 4.5.2.3	AM-243	OH207-7924-02	11/06/07 03:32	0.142	0.039	0.041	0.029
DOE 4.5.2.3	CM-243	OH207-7924-02	11/06/07 03:32	-0.009	0.044	0.044	0.076
DOE 4.5.2.3	AM-246	OH207-7924-02	11/06/07 03:32	0.032	0.053	0.053	0.100
DOE 4.5.2.3	CF-249	OH207-7924-02	11/06/07 03:32	0.010	0.019	0.019	0.034

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7924-LC1	SCAQC-7924-LD1		SCAQC-7924-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2171-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7924 Laboratory Code: SCA

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	OH207-7924-03	11/06/07 03:32	0.816	0.300	0.311	0.245
DOE 4.5.2.3	CO-60	OH207-7924-03	11/06/07 03:32	-0.002	0.015	0.015	0.021
DOE 4.5.2.3	RH-101	OH207-7924-03	11/06/07 03:32	-5.3e-04	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7924-03	11/06/07 03:32	-0.018	0.045	0.045	0.076
DOE 4.5.2.3	CS-137	OH207-7924-03	11/06/07 03:32	0.029	0.024	0.024	0.032
DOE 4.5.2.3	EU-155	OH207-7924-03	11/06/07 03:32	0.017	0.059	0.059	0.101
DOE 4.5.2.3	TL-208	OH207-7924-03	11/06/07 03:32	0.209	0.046	0.051	0.033
DOE 4.5.2.3	PO-209	OH207-7924-03	11/06/07 03:32	-0.091	3.36	3.36	5.95
DOE 4.5.2.3	BI-211	OH207-7924-03	11/06/07 03:32	-0.241	0.441	0.441	0.743
DOE 4.5.2.3	BI-212	OH207-7924-03	11/06/07 03:32	0.430	0.251	0.255	0.222
DOE 4.5.2.3	PB-212	OH207-7924-03	11/06/07 03:32	0.599	0.083	0.102	0.054
DOE 4.5.2.3	BI-214	OH207-7924-03	11/06/07 03:32	0.192	0.064	0.066	0.099
DOE 4.5.2.3	PB-214	OH207-7924-03	11/06/07 03:32	0.233	0.059	0.064	0.056
DOE 4.5.2.3	RA-223	OH207-7924-03	11/06/07 03:32	0.197	0.128	0.130	0.133
DOE 4.5.2.3	AC-228	OH207-7924-03	11/06/07 03:32	0.750	0.143	0.162	0.110
DOE 4.5.2.3	PA-233	OH207-7924-03	11/06/07 03:32	0.023	0.031	0.031	0.055
DOE 4.5.2.3	PA-234M	OH207-7924-03	11/06/07 03:32	0.917	1.97	1.97	3.69
DOE 4.5.2.3	TH-234	OH207-7924-03	11/06/07 03:32	1.28	0.458	0.475	0.638
DOE 4.5.2.3	U-235	OH207-7924-03	11/06/07 03:32	0.066	0.109	0.109	0.183
DOE 4.5.2.3	NP-236	OH207-7924-03	11/06/07 03:32	0.053	0.035	0.036	0.060
DOE 4.5.2.3	NP-237	OH207-7924-03	11/06/07 03:32	0.568	0.198	0.206	0.208
DOE 4.5.2.3	NP-239	OH207-7924-03	11/06/07 03:32	-0.074	0.105	0.105	0.178
DOE 4.5.2.3	AM-241	OH207-7924-03	11/06/07 03:32	-0.096	0.095	0.096	0.158
DOE 4.5.2.3	AM-243	OH207-7924-03	11/06/07 03:32	0.143	0.049	0.051	0.053
DOE 4.5.2.3	CM-243	OH207-7924-03	11/06/07 03:32	0.012	0.053	0.053	0.090
DOE 4.5.2.3	AM-246	OH207-7924-03	11/06/07 03:32	-0.007	0.050	0.050	0.088
DOE 4.5.2.3	CF-249	OH207-7924-03	11/06/07 03:32	0.006	0.019	0.019	0.033

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7924-LC1	SCAQC-7924-LD1		SCAQC-7924-PB1

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Radioanalytical Results

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2172-SD

Other Sample ID: Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Batch Number: 7924 Laboratory Code: SCA

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	OH207-7924-04	11/06/07 08:37	3.18	0.406	0.516	0.208
DOE 4.5.2.3	CO-60	OH207-7924-04	11/06/07 08:37	0.003	0.012	0.012	0.020
DOE 4.5.2.3	RH-101	OH207-7924-04	11/06/07 08:37	-0.004	0.014	0.014	0.024
DOE 4.5.2.3	SB-125	OH207-7924-04	11/06/07 08:37	0.015	0.035	0.035	0.061
DOE 4.5.2.3	CS-137	OH207-7924-04	11/06/07 08:37	0.101	0.026	0.028	0.026
DOE 4.5.2.3	EU-155	OH207-7924-04	11/06/07 08:37	0.065	0.053	0.053	0.092
DOE 4.5.2.3	TL-208	OH207-7924-04	11/06/07 08:37	0.303	0.044	0.054	0.023
DOE 4.5.2.3	PO-209	OH207-7924-04	11/06/07 08:37	1.99	2.27	2.28	4.29
DOE 4.5.2.3	BI-211	OH207-7924-04	11/06/07 08:37	0.010	0.413	0.413	0.725
DOE 4.5.2.3	BI-212	OH207-7924-04	11/06/07 08:37	0.632	0.210	0.219	0.177
DOE 4.5.2.3	PB-212	OH207-7924-04	11/06/07 08:37	0.864	0.081	0.119	0.039
DOE 4.5.2.3	BI-214	OH207-7924-04	11/06/07 08:37	0.576	0.084	0.102	0.045
DOE 4.5.2.3	PB-214	OH207-7924-04	11/06/07 08:37	0.584	0.071	0.092	0.045
DOE 4.5.2.3	RA-223	OH207-7924-04	11/06/07 08:37	0.321	0.123	0.127	0.115
DOE 4.5.2.3	AC-228	OH207-7924-04	11/06/07 08:37	0.880	0.138	0.164	0.081
DOE 4.5.2.3	PA-233	OH207-7924-04	11/06/07 08:37	0.008	0.024	0.024	0.043
DOE 4.5.2.3	PA-234M	OH207-7924-04	11/06/07 08:37	0.073	1.43	1.43	2.52
DOE 4.5.2.3	TH-234	OH207-7924-04	11/06/07 08:37	0.896	0.398	0.408	0.530
DOE 4.5.2.3	U-235	OH207-7924-04	11/06/07 08:37	0.051	0.090	0.090	0.153
DOE 4.5.2.3	NP-236	OH207-7924-04	11/06/07 08:37	0.027	0.031	0.031	0.054
DOE 4.5.2.3	NP-237	OH207-7924-04	11/06/07 08:37	0.414	0.175	0.180	0.216
DOE 4.5.2.3	NP-239	OH207-7924-04	11/06/07 08:37	0.011	0.092	0.092	0.151
DOE 4.5.2.3	AM-241	OH207-7924-04	11/06/07 08:37	-0.056	0.081	0.081	0.138
DOE 4.5.2.3	AM-243	OH207-7924-04	11/06/07 08:37	0.179	0.055	0.058	0.048
DOE 4.5.2.3	CM-243	OH207-7924-04	11/06/07 08:37	-0.003	0.048	0.048	0.081
DOE 4.5.2.3	AM-246	OH207-7924-04	11/06/07 08:37	0.031	0.042	0.043	0.079
DOE 4.5.2.3	CF-249	OH207-7924-04	11/06/07 08:37	-0.005	0.016	0.016	0.027

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7924-LC1	SCAQC-7924-LD1		SCAQC-7924-PB1

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Radioanalytical Results

Quality Control Sample
Laboratory Control (LC1)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	None	Matrix:	Soil
Site Sample ID:	N/A				
Other Sample ID:	LC1	Collection Date:	9/27/2007 8:45:00 AM	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

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-7921-LC1	11/03/07 18:41	30.9	1.73	3.54	0.055
DOE 4.5.2.3	CS-137	SCAQC-7921-LC1	11/03/07 18:41	30.4	3.47	4.61	0.095
DOE 4.5.2.3	PB-214	SCAQC-7921-LC1	11/03/07 18:41	0.257	0.139	0.141	0.165
DOE 4.5.2.3	AM-241	SCAQC-7921-LC1	11/03/07 18:41	81.0	5.39	9.73	0.563

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Quality Control Sample
Laboratory Control (LC1)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	None	Matrix:	Soil
Site Sample ID:	N/A				
Other Sample ID:	LC1	Collection Date:	9/27/2007 8:45:00 AM	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

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-7922-LC1	11/04/07 21:01	30.8	1.94	3.64	0.086
DOE 4.5.2.3	CS-137	SCAQC-7922-LC1	11/04/07 21:01	30.7	3.32	4.53	0.160
DOE 4.5.2.3	AM-241	SCAQC-7922-LC1	11/04/07 21:01	73.6	5.98	9.49	0.996

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Quality Control Sample
Laboratory Control (LC1)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	None	Matrix:	Soil
Site Sample ID:	N/A				
Other Sample ID:	LC1	Collection Date:	9/27/2007 8:45:00 AM	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

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-7923-LC1	11/05/07 16:59	31.8	2.01	3.76	0.106
DOE 4.5.2.3	CS-137	SCAQC-7923-LC1	11/05/07 16:59	30.3	2.23	3.76	0.189
DOE 4.5.2.3	AM-241	SCAQC-7923-LC1	11/05/07 16:59	77.0	4.91	9.13	0.335

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7923-LC1	SCAQC-7923-LD1		SCAQC-7923-PB1

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Radioanalytical Results

Quality Control Sample
Laboratory Control (LC1)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: None Matrix: Soil
Site Sample ID: N/A
Other Sample ID: LC1 Collection Date: 9/27/2007 8:45:00 AM Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7924-LC1	11/05/07 18:01	32.4	2.04	3.83	0.102
DOE 4.5.2.3	CS-137	SCAQC-7924-LC1	11/05/07 18:01	30.9	2.27	3.83	0.188
DOE 4.5.2.3	AM-241	SCAQC-7924-LC1	11/05/07 18:01	77.7	4.96	9.22	0.328

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7924-LC1	SCAQC-7924-LD1		SCAQC-7924-PB1

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2155-ST
Other Sample ID: LD1 Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7921-LD1	11/03/07 14:44	6.06	0.618	0.866	0.199
DOE 4.5.2.3	CO-60	SCAQC-7921-LD1	11/03/07 14:44	4.0e-05	0.015	0.015	0.023
DOE 4.5.2.3	RH-101	SCAQC-7921-LD1	11/03/07 14:44	0.007	0.016	0.016	0.027
DOE 4.5.2.3	SB-125	SCAQC-7921-LD1	11/03/07 14:44	-0.019	0.042	0.042	0.069
DOE 4.5.2.3	CS-137	SCAQC-7921-LD1	11/03/07 14:44	0.167	0.032	0.036	0.029
DOE 4.5.2.3	EU-155	SCAQC-7921-LD1	11/03/07 14:44	0.066	0.056	0.056	0.096
DOE 4.5.2.3	TL-208	SCAQC-7921-LD1	11/03/07 14:44	0.356	0.053	0.064	0.025
DOE 4.5.2.3	PO-209	SCAQC-7921-LD1	11/03/07 14:44	-0.408	2.85	2.85	4.91
DOE 4.5.2.3	BI-211	SCAQC-7921-LD1	11/03/07 14:44	-0.474	0.439	0.441	0.701
DOE 4.5.2.3	BI-212	SCAQC-7921-LD1	11/03/07 14:44	0.740	0.230	0.242	0.202
DOE 4.5.2.3	PB-212	SCAQC-7921-LD1	11/03/07 14:44	0.958	0.088	0.130	0.042
DOE 4.5.2.3	BI-214	SCAQC-7921-LD1	11/03/07 14:44	0.702	0.100	0.122	0.050
DOE 4.5.2.3	PB-214	SCAQC-7921-LD1	11/03/07 14:44	0.772	0.088	0.117	0.051
DOE 4.5.2.3	RA-223	SCAQC-7921-LD1	11/03/07 14:44	0.362	0.122	0.128	0.132
DOE 4.5.2.3	AC-228	SCAQC-7921-LD1	11/03/07 14:44	1.06	0.152	0.185	0.091
DOE 4.5.2.3	PA-233	SCAQC-7921-LD1	11/03/07 14:44	-0.007	0.027	0.027	0.046
DOE 4.5.2.3	PA-234M	SCAQC-7921-LD1	11/03/07 14:44	0.897	1.78	1.78	3.21
DOE 4.5.2.3	TH-234	SCAQC-7921-LD1	11/03/07 14:44	1.09	0.403	0.418	0.431
DOE 4.5.2.3	U-235	SCAQC-7921-LD1	11/03/07 14:44	0.069	0.104	0.104	0.173
DOE 4.5.2.3	NP-236	SCAQC-7921-LD1	11/03/07 14:44	0.017	0.034	0.034	0.057
DOE 4.5.2.3	NP-237	SCAQC-7921-LD1	11/03/07 14:44	0.313	0.152	0.155	0.216
DOE 4.5.2.3	NP-239	SCAQC-7921-LD1	11/03/07 14:44	0.017	0.101	0.101	0.176
DOE 4.5.2.3	AM-241	SCAQC-7921-LD1	11/03/07 14:44	-0.046	0.094	0.094	0.141
DOE 4.5.2.3	AM-243	SCAQC-7921-LD1	11/03/07 14:44	0.195	0.058	0.062	0.047
DOE 4.5.2.3	CM-243	SCAQC-7921-LD1	11/03/07 14:44	0.017	0.051	0.051	0.086
DOE 4.5.2.3	AM-246	SCAQC-7921-LD1	11/03/07 14:44	0.081	0.055	0.055	0.104
DOE 4.5.2.3	CF-249	SCAQC-7921-LD1	11/03/07 14:44	0.002	0.018	0.018	0.030

Laboratory Samples for Duplicates

Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7921-LD1	OH207-7921-01

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2155-ST				
Other Sample ID:	LD1	Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

	Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2155-SD
Other Sample ID: LD1 Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7922-LD1	11/04/07 17:05	3.98	0.538	0.669	0.241
DOE 4.5.2.3	CO-60	SCAQC-7922-LD1	11/04/07 17:05	-0.006	0.016	0.016	0.027
DOE 4.5.2.3	RH-101	SCAQC-7922-LD1	11/04/07 17:05	-0.005	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	SCAQC-7922-LD1	11/04/07 17:05	0.003	0.041	0.041	0.071
DOE 4.5.2.3	CS-137	SCAQC-7922-LD1	11/04/07 17:05	0.003	0.018	0.018	0.032
DOE 4.5.2.3	EU-155	SCAQC-7922-LD1	11/04/07 17:05	0.112	0.064	0.065	0.112
DOE 4.5.2.3	TL-208	SCAQC-7922-LD1	11/04/07 17:05	0.367	0.053	0.065	0.026
DOE 4.5.2.3	PO-209	SCAQC-7922-LD1	11/04/07 17:05	0.428	2.82	2.82	5.07
DOE 4.5.2.3	BI-211	SCAQC-7922-LD1	11/04/07 17:05	-0.021	0.462	0.462	0.812
DOE 4.5.2.3	BI-212	SCAQC-7922-LD1	11/04/07 17:05	0.764	0.262	0.273	0.230
DOE 4.5.2.3	PB-212	SCAQC-7922-LD1	11/04/07 17:05	1.06	0.099	0.145	0.044
DOE 4.5.2.3	BI-214	SCAQC-7922-LD1	11/04/07 17:05	0.564	0.102	0.117	0.052
DOE 4.5.2.3	PB-214	SCAQC-7922-LD1	11/04/07 17:05	0.593	0.087	0.105	0.052
DOE 4.5.2.3	RA-223	SCAQC-7922-LD1	11/04/07 17:05	0.403	0.156	0.161	0.137
DOE 4.5.2.3	AC-228	SCAQC-7922-LD1	11/04/07 17:05	1.21	0.150	0.192	0.095
DOE 4.5.2.3	PA-233	SCAQC-7922-LD1	11/04/07 17:05	-0.015	0.029	0.029	0.050
DOE 4.5.2.3	PA-234M	SCAQC-7922-LD1	11/04/07 17:05	0.706	1.78	1.79	3.24
DOE 4.5.2.3	TH-234	SCAQC-7922-LD1	11/04/07 17:05	1.22	0.488	0.503	0.650
DOE 4.5.2.3	U-235	SCAQC-7922-LD1	11/04/07 17:05	0.066	0.107	0.108	0.182
DOE 4.5.2.3	NP-236	SCAQC-7922-LD1	11/04/07 17:05	0.042	0.036	0.036	0.063
DOE 4.5.2.3	NP-237	SCAQC-7922-LD1	11/04/07 17:05	0.285	0.184	0.186	0.265
DOE 4.5.2.3	NP-239	SCAQC-7922-LD1	11/04/07 17:05	-0.024	0.112	0.112	0.182
DOE 4.5.2.3	AM-241	SCAQC-7922-LD1	11/04/07 17:05	-0.006	0.099	0.099	0.172
DOE 4.5.2.3	AM-243	SCAQC-7922-LD1	11/04/07 17:05	0.205	0.059	0.062	0.056
DOE 4.5.2.3	CM-243	SCAQC-7922-LD1	11/04/07 17:05	0.030	0.058	0.058	0.100
DOE 4.5.2.3	AM-246	SCAQC-7922-LD1	11/04/07 17:05	0.029	0.052	0.052	0.096
DOE 4.5.2.3	CF-249	SCAQC-7922-LD1	11/04/07 17:05	-0.010	0.019	0.019	0.032

Laboratory Samples for Duplicates

Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7922-LD1	OH207-7922-01

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2155-SD				
Other Sample ID:	LD1	Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil
Site Sample ID: SB-CZ-SS-2169-ST
Other Sample ID: LD1 Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7923-LD1	11/05/07 16:57	3.91	0.451	0.596	0.170
DOE 4.5.2.3	CO-60	SCAQC-7923-LD1	11/05/07 16:57	0.004	0.013	0.013	0.024
DOE 4.5.2.3	RH-101	SCAQC-7923-LD1	11/05/07 16:57	-0.003	0.016	0.016	0.025
DOE 4.5.2.3	SB-125	SCAQC-7923-LD1	11/05/07 16:57	0.004	0.039	0.039	0.067
DOE 4.5.2.3	CS-137	SCAQC-7923-LD1	11/05/07 16:57	0.197	0.036	0.041	0.027
DOE 4.5.2.3	EU-155	SCAQC-7923-LD1	11/05/07 16:57	0.099	0.079	0.079	0.089
DOE 4.5.2.3	TL-208	SCAQC-7923-LD1	11/05/07 16:57	0.297	0.045	0.054	0.025
DOE 4.5.2.3	PO-209	SCAQC-7923-LD1	11/05/07 16:57	1.50	2.74	2.74	4.96
DOE 4.5.2.3	BI-211	SCAQC-7923-LD1	11/05/07 16:57	0.033	0.402	0.402	0.706
DOE 4.5.2.3	BI-212	SCAQC-7923-LD1	11/05/07 16:57	0.514	0.236	0.241	0.189
DOE 4.5.2.3	PB-212	SCAQC-7923-LD1	11/05/07 16:57	0.916	0.085	0.125	0.041
DOE 4.5.2.3	BI-214	SCAQC-7923-LD1	11/05/07 16:57	0.650	0.098	0.117	0.046
DOE 4.5.2.3	PB-214	SCAQC-7923-LD1	11/05/07 16:57	0.695	0.084	0.109	0.045
DOE 4.5.2.3	RA-223	SCAQC-7923-LD1	11/05/07 16:57	0.280	0.142	0.144	0.126
DOE 4.5.2.3	AC-228	SCAQC-7923-LD1	11/05/07 16:57	1.01	0.149	0.180	0.079
DOE 4.5.2.3	PA-233	SCAQC-7923-LD1	11/05/07 16:57	-0.013	0.026	0.026	0.043
DOE 4.5.2.3	PA-234M	SCAQC-7923-LD1	11/05/07 16:57	0.529	1.54	1.54	2.78
DOE 4.5.2.3	TH-234	SCAQC-7923-LD1	11/05/07 16:57	1.34	0.408	0.430	0.530
DOE 4.5.2.3	U-235	SCAQC-7923-LD1	11/05/07 16:57	-0.005	0.097	0.097	0.158
DOE 4.5.2.3	NP-236	SCAQC-7923-LD1	11/05/07 16:57	0.023	0.033	0.033	0.054
DOE 4.5.2.3	NP-237	SCAQC-7923-LD1	11/05/07 16:57	0.516	0.164	0.172	0.186
DOE 4.5.2.3	NP-239	SCAQC-7923-LD1	11/05/07 16:57	0.011	0.096	0.096	0.166
DOE 4.5.2.3	AM-241	SCAQC-7923-LD1	11/05/07 16:57	0.032	0.082	0.082	0.141
DOE 4.5.2.3	AM-243	SCAQC-7923-LD1	11/05/07 16:57	0.155	0.044	0.047	0.046
DOE 4.5.2.3	CM-243	SCAQC-7923-LD1	11/05/07 16:57	0.014	0.054	0.055	0.082
DOE 4.5.2.3	AM-246	SCAQC-7923-LD1	11/05/07 16:57	0.014	0.047	0.047	0.085
DOE 4.5.2.3	CF-249	SCAQC-7923-LD1	11/05/07 16:57	0.011	0.017	0.017	0.029

Laboratory Samples for Duplicates

Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7923-LD1	OH207-7923-01

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2169-ST				
Other Sample ID:	LD1	Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7923-LC1	SCAQC-7923-LD1		SCAQC-7923-PB1

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: COC #24/07-3080.04 Matrix: Soil

Site Sample ID: SB-CZ-SS-2169-SD

Other Sample ID: LD1 Collection Date: 9/24/2007 Date Received: 9/27/2007 8:45:00

Laboratory Code: SCA

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-7924-LD1	11/06/07 03:31	3.68	0.480	0.604	0.190
DOE 4.5.2.3	CO-60	SCAQC-7924-LD1	11/06/07 03:31	0.008	0.013	0.013	0.023
DOE 4.5.2.3	RH-101	SCAQC-7924-LD1	11/06/07 03:31	0.002	0.016	0.016	0.027
DOE 4.5.2.3	SB-125	SCAQC-7924-LD1	11/06/07 03:31	-0.046	0.038	0.038	0.060
DOE 4.5.2.3	CS-137	SCAQC-7924-LD1	11/06/07 03:31	0.061	0.030	0.031	0.027
DOE 4.5.2.3	EU-155	SCAQC-7924-LD1	11/06/07 03:31	0.008	0.057	0.057	0.097
DOE 4.5.2.3	TL-208	SCAQC-7924-LD1	11/06/07 03:31	0.379	0.052	0.065	0.025
DOE 4.5.2.3	PO-209	SCAQC-7924-LD1	11/06/07 03:31	-0.694	2.50	2.50	4.32
DOE 4.5.2.3	BI-211	SCAQC-7924-LD1	11/06/07 03:31	-0.437	0.414	0.416	0.669
DOE 4.5.2.3	BI-212	SCAQC-7924-LD1	11/06/07 03:31	0.690	0.240	0.250	0.208
DOE 4.5.2.3	PB-212	SCAQC-7924-LD1	11/06/07 03:31	1.03	0.095	0.140	0.042
DOE 4.5.2.3	BI-214	SCAQC-7924-LD1	11/06/07 03:31	0.518	0.086	0.100	0.055
DOE 4.5.2.3	PB-214	SCAQC-7924-LD1	11/06/07 03:31	0.551	0.072	0.090	0.048
DOE 4.5.2.3	RA-223	SCAQC-7924-LD1	11/06/07 03:31	0.383	0.139	0.144	0.126
DOE 4.5.2.3	AC-228	SCAQC-7924-LD1	11/06/07 03:31	1.19	0.149	0.191	0.088
DOE 4.5.2.3	PA-233	SCAQC-7924-LD1	11/06/07 03:31	0.015	0.027	0.027	0.048
DOE 4.5.2.3	PA-234M	SCAQC-7924-LD1	11/06/07 03:31	-0.706	1.62	1.62	2.73
DOE 4.5.2.3	TH-234	SCAQC-7924-LD1	11/06/07 03:31	1.38	0.431	0.453	0.591
DOE 4.5.2.3	U-235	SCAQC-7924-LD1	11/06/07 03:31	0.106	0.100	0.100	0.171
DOE 4.5.2.3	NP-236	SCAQC-7924-LD1	11/06/07 03:31	0.048	0.035	0.036	0.059
DOE 4.5.2.3	NP-237	SCAQC-7924-LD1	11/06/07 03:31	0.609	0.204	0.213	0.208
DOE 4.5.2.3	NP-239	SCAQC-7924-LD1	11/06/07 03:31	-0.025	0.102	0.102	0.165
DOE 4.5.2.3	AM-241	SCAQC-7924-LD1	11/06/07 03:31	-0.120	0.091	0.092	0.150
DOE 4.5.2.3	AM-243	SCAQC-7924-LD1	11/06/07 03:31	0.212	0.062	0.065	0.049
DOE 4.5.2.3	CM-243	SCAQC-7924-LD1	11/06/07 03:31	0.017	0.052	0.052	0.088
DOE 4.5.2.3	AM-246	SCAQC-7924-LD1	11/06/07 03:31	0.034	0.047	0.047	0.087
DOE 4.5.2.3	CF-249	SCAQC-7924-LD1	11/06/07 03:31	-0.011	0.017	0.017	0.028

Laboratory Samples for Duplicates

Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7924-LD1	OH207-7924-01

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	COC #24/07-3080.04	Matrix:	Soil
Site Sample ID:	SB-CZ-SS-2169-SD				
Other Sample ID:	LD1	Collection Date:	9/24/2007	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7924-LC1	SCAQC-7924-LD1		SCAQC-7924-PB1

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: None Matrix: Soil
Site Sample ID: N/A
Other Sample ID: PB Collection Date: 9/27/2007 8:45:00 AM Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7921-PB1	11/03/07 14:41	-0.039	0.115	0.115	0.220
DOE 4.5.2.3	CO-60	SCAQC-7921-PB1	11/03/07 14:41	0.001	0.009	0.009	0.016
DOE 4.5.2.3	RH-101	SCAQC-7921-PB1	11/03/07 14:41	-0.006	0.010	0.010	0.017
DOE 4.5.2.3	SB-125	SCAQC-7921-PB1	11/03/07 14:41	0.024	0.026	0.026	0.050
DOE 4.5.2.3	CS-137	SCAQC-7921-PB1	11/03/07 14:41	0.009	0.010	0.010	0.020
DOE 4.5.2.3	EU-155	SCAQC-7921-PB1	11/03/07 14:41	-0.002	0.033	0.033	0.058
DOE 4.5.2.3	TL-208	SCAQC-7921-PB1	11/03/07 14:41	-5.5e-04	0.011	0.011	0.020
DOE 4.5.2.3	PO-209	SCAQC-7921-PB1	11/03/07 14:41	-0.109	1.86	1.86	3.40
DOE 4.5.2.3	BI-211	SCAQC-7921-PB1	11/03/07 14:41	0.129	0.253	0.253	0.497
DOE 4.5.2.3	BI-212	SCAQC-7921-PB1	11/03/07 14:41	0.048	0.077	0.078	0.151
DOE 4.5.2.3	PB-212	SCAQC-7921-PB1	11/03/07 14:41	0.008	0.018	0.018	0.032
DOE 4.5.2.3	BI-214	SCAQC-7921-PB1	11/03/07 14:41	0.042	0.030	0.030	0.045
DOE 4.5.2.3	PB-214	SCAQC-7921-PB1	11/03/07 14:41	0.018	0.021	0.021	0.040
DOE 4.5.2.3	RA-223	SCAQC-7921-PB1	11/03/07 14:41	0.025	0.046	0.046	0.086
DOE 4.5.2.3	AC-228	SCAQC-7921-PB1	11/03/07 14:41	0.002	0.037	0.037	0.070
DOE 4.5.2.3	PA-233	SCAQC-7921-PB1	11/03/07 14:41	0.008	0.019	0.019	0.034
DOE 4.5.2.3	PA-234M	SCAQC-7921-PB1	11/03/07 14:41	0.224	1.21	1.21	2.25
DOE 4.5.2.3	TH-234	SCAQC-7921-PB1	11/03/07 14:41	-0.056	0.194	0.194	0.351
DOE 4.5.2.3	U-235	SCAQC-7921-PB1	11/03/07 14:41	-0.044	0.062	0.063	0.100
DOE 4.5.2.3	NP-236	SCAQC-7921-PB1	11/03/07 14:41	0.011	0.019	0.019	0.034
DOE 4.5.2.3	NP-237	SCAQC-7921-PB1	11/03/07 14:41	-0.018	0.072	0.072	0.124
DOE 4.5.2.3	NP-239	SCAQC-7921-PB1	11/03/07 14:41	0.065	0.065	0.066	0.116
DOE 4.5.2.3	AM-241	SCAQC-7921-PB1	11/03/07 14:41	0.003	0.053	0.053	0.095
DOE 4.5.2.3	AM-243	SCAQC-7921-PB1	11/03/07 14:41	0.003	0.018	0.018	0.032
DOE 4.5.2.3	CM-243	SCAQC-7921-PB1	11/03/07 14:41	0.006	0.029	0.029	0.051
DOE 4.5.2.3	AM-246	SCAQC-7921-PB1	11/03/07 14:41	-0.010	0.031	0.031	0.054
DOE 4.5.2.3	CF-249	SCAQC-7921-PB1	11/03/07 14:41	-0.004	0.011	0.011	0.019

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	None	Matrix:	Soil
Site Sample ID:	N/A				
Other Sample ID:	PB	Collection Date:	9/27/2007 8:45:00 AM	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7921-LC1	SCAQC-7921-LD1		SCAQC-7921-PB1

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: None Matrix: Soil
Site Sample ID: N/A
Other Sample ID: PB Collection Date: 9/27/2007 8:45:00 AM Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7922-PB1	11/04/07 13:53	0.008	0.177	0.177	0.341
DOE 4.5.2.3	CO-60	SCAQC-7922-PB1	11/04/07 13:53	0.002	0.013	0.013	0.023
DOE 4.5.2.3	RH-101	SCAQC-7922-PB1	11/04/07 13:53	-0.003	0.012	0.012	0.021
DOE 4.5.2.3	SB-125	SCAQC-7922-PB1	11/04/07 13:53	-0.002	0.033	0.033	0.058
DOE 4.5.2.3	CS-137	SCAQC-7922-PB1	11/04/07 13:53	0.001	0.012	0.012	0.022
DOE 4.5.2.3	EU-155	SCAQC-7922-PB1	11/04/07 13:53	0.009	0.033	0.033	0.059
DOE 4.5.2.3	TL-208	SCAQC-7922-PB1	11/04/07 13:53	-0.003	0.014	0.014	0.025
DOE 4.5.2.3	PO-209	SCAQC-7922-PB1	11/04/07 13:53	-0.617	2.34	2.34	4.20
DOE 4.5.2.3	BI-211	SCAQC-7922-PB1	11/04/07 13:53	0.136	0.397	0.398	0.726
DOE 4.5.2.3	BI-212	SCAQC-7922-PB1	11/04/07 13:53	0.037	0.104	0.104	0.190
DOE 4.5.2.3	PB-212	SCAQC-7922-PB1	11/04/07 13:53	-0.014	0.024	0.024	0.040
DOE 4.5.2.3	BI-214	SCAQC-7922-PB1	11/04/07 13:53	0.007	0.029	0.029	0.052
DOE 4.5.2.3	PB-214	SCAQC-7922-PB1	11/04/07 13:53	0.044	0.037	0.037	0.052
DOE 4.5.2.3	RA-223	SCAQC-7922-PB1	11/04/07 13:53	0.044	0.065	0.066	0.117
DOE 4.5.2.3	AC-228	SCAQC-7922-PB1	11/04/07 13:53	0.032	0.053	0.053	0.104
DOE 4.5.2.3	PA-233	SCAQC-7922-PB1	11/04/07 13:53	0.003	0.022	0.022	0.039
DOE 4.5.2.3	PA-234M	SCAQC-7922-PB1	11/04/07 13:53	0.325	1.54	1.54	2.85
DOE 4.5.2.3	TH-234	SCAQC-7922-PB1	11/04/07 13:53	0.087	0.192	0.192	0.360
DOE 4.5.2.3	U-235	SCAQC-7922-PB1	11/04/07 13:53	0.003	0.075	0.075	0.130
DOE 4.5.2.3	NP-236	SCAQC-7922-PB1	11/04/07 13:53	0.013	0.018	0.018	0.031
DOE 4.5.2.3	NP-237	SCAQC-7922-PB1	11/04/07 13:53	-0.057	0.058	0.058	0.090
DOE 4.5.2.3	NP-239	SCAQC-7922-PB1	11/04/07 13:53	-0.017	0.081	0.081	0.138
DOE 4.5.2.3	AM-241	SCAQC-7922-PB1	11/04/07 13:53	-0.098	0.026	0.028	0.034
DOE 4.5.2.3	AM-243	SCAQC-7922-PB1	11/04/07 13:53	-0.003	0.012	0.012	0.020
DOE 4.5.2.3	CM-243	SCAQC-7922-PB1	11/04/07 13:53	-0.002	0.030	0.030	0.052
DOE 4.5.2.3	AM-246	SCAQC-7922-PB1	11/04/07 13:53	0.013	0.048	0.048	0.091
DOE 4.5.2.3	CF-249	SCAQC-7922-PB1	11/04/07 13:53	0.002	0.015	0.015	0.027

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	None	Matrix:	Soil
Site Sample ID:	N/A				
Other Sample ID:	PB	Collection Date:	9/27/2007 8:45:00 AM	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7922-LC1	SCAQC-7922-LD1		SCAQC-7922-PB1

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: None Matrix: Soil
Site Sample ID: N/A
Other Sample ID: PB Collection Date: 9/27/2007 8:45:00 AM Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7923-PB1	11/05/07 19:59	0.035	0.120	0.120	0.259
DOE 4.5.2.3	CO-60	SCAQC-7923-PB1	11/05/07 19:59	-3.0e-04	0.009	0.009	0.018
DOE 4.5.2.3	RH-101	SCAQC-7923-PB1	11/05/07 19:59	0.004	0.011	0.011	0.018
DOE 4.5.2.3	SB-125	SCAQC-7923-PB1	11/05/07 19:59	0.004	0.026	0.026	0.047
DOE 4.5.2.3	CS-137	SCAQC-7923-PB1	11/05/07 19:59	0.002	0.010	0.010	0.019
DOE 4.5.2.3	EU-155	SCAQC-7923-PB1	11/05/07 19:59	-0.015	0.035	0.035	0.058
DOE 4.5.2.3	TL-208	SCAQC-7923-PB1	11/05/07 19:59	0.007	0.011	0.011	0.021
DOE 4.5.2.3	PO-209	SCAQC-7923-PB1	11/05/07 19:59	0.149	2.02	2.02	3.70
DOE 4.5.2.3	BI-211	SCAQC-7923-PB1	11/05/07 19:59	-0.030	0.260	0.260	0.470
DOE 4.5.2.3	BI-212	SCAQC-7923-PB1	11/05/07 19:59	0.087	0.074	0.074	0.150
DOE 4.5.2.3	PB-212	SCAQC-7923-PB1	11/05/07 19:59	-5.5e-04	0.018	0.018	0.032
DOE 4.5.2.3	BI-214	SCAQC-7923-PB1	11/05/07 19:59	0.016	0.024	0.024	0.046
DOE 4.5.2.3	PB-214	SCAQC-7923-PB1	11/05/07 19:59	0.068	0.043	0.043	0.044
DOE 4.5.2.3	RA-223	SCAQC-7923-PB1	11/05/07 19:59	-0.009	0.055	0.055	0.095
DOE 4.5.2.3	AC-228	SCAQC-7923-PB1	11/05/07 19:59	0.018	0.042	0.042	0.082
DOE 4.5.2.3	PA-233	SCAQC-7923-PB1	11/05/07 19:59	-0.013	0.019	0.019	0.032
DOE 4.5.2.3	PA-234M	SCAQC-7923-PB1	11/05/07 19:59	-0.504	1.24	1.24	2.17
DOE 4.5.2.3	TH-234	SCAQC-7923-PB1	11/05/07 19:59	-0.098	0.181	0.182	0.330
DOE 4.5.2.3	U-235	SCAQC-7923-PB1	11/05/07 19:59	0.021	0.062	0.062	0.104
DOE 4.5.2.3	NP-236	SCAQC-7923-PB1	11/05/07 19:59	-0.007	0.020	0.020	0.034
DOE 4.5.2.3	NP-237	SCAQC-7923-PB1	11/05/07 19:59	0.040	0.075	0.075	0.129
DOE 4.5.2.3	NP-239	SCAQC-7923-PB1	11/05/07 19:59	0.005	0.064	0.064	0.113
DOE 4.5.2.3	AM-241	SCAQC-7923-PB1	11/05/07 19:59	-0.010	0.049	0.049	0.085
DOE 4.5.2.3	AM-243	SCAQC-7923-PB1	11/05/07 19:59	-9.8e-04	0.017	0.017	0.029
DOE 4.5.2.3	CM-243	SCAQC-7923-PB1	11/05/07 19:59	9.4e-04	0.032	0.032	0.054
DOE 4.5.2.3	AM-246	SCAQC-7923-PB1	11/05/07 19:59	0.001	0.033	0.033	0.061
DOE 4.5.2.3	CF-249	SCAQC-7923-PB1	11/05/07 19:59	0.001	0.013	0.013	0.022

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	None	Matrix:	Soil
Site Sample ID:	N/A				
Other Sample ID:	PB	Collection Date:	9/27/2007 8:45:00 AM	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

	Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7923-LC1	SCAQC-7923-LD1		SCAQC-7923-PB1

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah Chain-of-Custody Number: None Matrix: Soil
Site Sample ID: N/A
Other Sample ID: PB Collection Date: 9/27/2007 8:45:00 AM Date Received: 9/27/2007 8:45:00
Laboratory Code: SCA

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-7924-PB1	11/06/07 00:07	0.101	0.178	0.178	0.358
DOE 4.5.2.3	CO-60	SCAQC-7924-PB1	11/06/07 00:07	0.006	0.010	0.010	0.021
DOE 4.5.2.3	RH-101	SCAQC-7924-PB1	11/06/07 00:07	-0.005	0.012	0.012	0.021
DOE 4.5.2.3	SB-125	SCAQC-7924-PB1	11/06/07 00:07	0.001	0.031	0.031	0.055
DOE 4.5.2.3	CS-137	SCAQC-7924-PB1	11/06/07 00:07	0.005	0.012	0.012	0.022
DOE 4.5.2.3	EU-155	SCAQC-7924-PB1	11/06/07 00:07	-0.010	0.031	0.031	0.054
DOE 4.5.2.3	TL-208	SCAQC-7924-PB1	11/06/07 00:07	-0.002	0.014	0.014	0.026
DOE 4.5.2.3	PO-209	SCAQC-7924-PB1	11/06/07 00:07	2.77	2.68	2.69	5.34
DOE 4.5.2.3	BI-211	SCAQC-7924-PB1	11/06/07 00:07	0.189	0.352	0.353	0.666
DOE 4.5.2.3	BI-212	SCAQC-7924-PB1	11/06/07 00:07	0.067	0.101	0.101	0.191
DOE 4.5.2.3	PB-212	SCAQC-7924-PB1	11/06/07 00:07	-4.4e-04	0.024	0.024	0.041
DOE 4.5.2.3	BI-214	SCAQC-7924-PB1	11/06/07 00:07	0.021	0.026	0.026	0.050
DOE 4.5.2.3	PB-214	SCAQC-7924-PB1	11/06/07 00:07	-0.006	0.028	0.028	0.046
DOE 4.5.2.3	RA-223	SCAQC-7924-PB1	11/06/07 00:07	0.011	0.064	0.064	0.111
DOE 4.5.2.3	AC-228	SCAQC-7924-PB1	11/06/07 00:07	-0.014	0.053	0.053	0.096
DOE 4.5.2.3	PA-233	SCAQC-7924-PB1	11/06/07 00:07	-0.003	0.024	0.024	0.041
DOE 4.5.2.3	PA-234M	SCAQC-7924-PB1	11/06/07 00:07	-0.082	1.61	1.61	2.88
DOE 4.5.2.3	TH-234	SCAQC-7924-PB1	11/06/07 00:07	-0.050	0.188	0.188	0.348
DOE 4.5.2.3	U-235	SCAQC-7924-PB1	11/06/07 00:07	-0.073	0.074	0.074	0.122
DOE 4.5.2.3	NP-236	SCAQC-7924-PB1	11/06/07 00:07	-0.003	0.018	0.018	0.030
DOE 4.5.2.3	NP-237	SCAQC-7924-PB1	11/06/07 00:07	-0.061	0.058	0.059	0.091
DOE 4.5.2.3	NP-239	SCAQC-7924-PB1	11/06/07 00:07	0.068	0.080	0.080	0.144
DOE 4.5.2.3	AM-241	SCAQC-7924-PB1	11/06/07 00:07	-0.097	0.026	0.028	0.035
DOE 4.5.2.3	AM-243	SCAQC-7924-PB1	11/06/07 00:07	0.004	0.012	0.012	0.020
DOE 4.5.2.3	CM-243	SCAQC-7924-PB1	11/06/07 00:07	5.8e-04	0.028	0.028	0.049
DOE 4.5.2.3	AM-246	SCAQC-7924-PB1	11/06/07 00:07	-0.040	0.051	0.052	0.085
DOE 4.5.2.3	CF-249	SCAQC-7924-PB1	11/06/07 00:07	0.016	0.015	0.015	0.028

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7921_7924

Project Name:	Cabrera Services-Oah	Chain-of-Custody Number:	None	Matrix:	Soil
Site Sample ID:	N/A				
Other Sample ID:	PB	Collection Date:	9/27/2007 8:45:00 AM	Date Received:	9/27/2007 8:45:00
				Laboratory Code:	SCA

Quality Control Samples

Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7924-LC1	SCAQC-7924-LD1		SCAQC-7924-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah
Matrix: Soil
Laboratory Code: SCA

Laboratory Contol Sample (LC1) Evaluation

Method Number	Radionuclide	Laboratory Sample ID	(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
DOE 4.5.2.3	CO-60	SCAQC-7924-LC1	31.1 ± 0.839	32.4 ± 3.83	104	0.488
DOE 4.5.2.3	CO-60	SCAQC-7923-LC1	31.1 ± 0.839	31.8 ± 3.76	102	0.265
DOE 4.5.2.3	CO-60	SCAQC-7922-LC1	31.1 ± 0.839	30.8 ± 3.64	99.2	0.095
DOE 4.5.2.3	CO-60	SCAQC-7921-LC1	31.1 ± 0.839	30.9 ± 3.54	99.4	0.080
DOE 4.5.2.3	CS-137	SCAQC-7924-LC1	28.8 ± 0.864	30.9 ± 3.83	107	0.792
DOE 4.5.2.3	CS-137	SCAQC-7923-LC1	28.8 ± 0.864	30.3 ± 3.76	105	0.575
DOE 4.5.2.3	CS-137	SCAQC-7922-LC1	28.8 ± 0.864	30.7 ± 4.53	107	0.668
DOE 4.5.2.3	CS-137	SCAQC-7921-LC1	28.8 ± 0.864	30.4 ± 4.61	106	0.558
DOE 4.5.2.3	AM-241	SCAQC-7924-LC1	77.0 ± 2.31	77.7 ± 9.22	101	0.109
DOE 4.5.2.3	AM-241	SCAQC-7923-LC1	77.0 ± 2.31	77.0 ± 9.13	100	6.1e-04
DOE 4.5.2.3	AM-241	SCAQC-7922-LC1	77.0 ± 2.31	73.6 ± 9.49	95.6	0.525
DOE 4.5.2.3	AM-241	SCAQC-7921-LC1	77.0 ± 2.31	81.0 ± 9.73	105	0.590

Laboratory Duplicate Sample (LD1) Evaluation

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-7921-LD1	5.99 ± 0.852	6.06 ± 0.866	0.066	0.109
DOE 4.5.2.3	K-40	SCAQC-7922-LD1	4.38 ± 0.734	3.98 ± 0.669	0.403	0.812
DOE 4.5.2.3	K-40	SCAQC-7923-LD1	4.14 ± 0.629	3.91 ± 0.596	0.232	0.535
DOE 4.5.2.3	K-40	SCAQC-7924-LD1	3.49 ± 0.591	3.68 ± 0.604	0.190	0.450
DOE 4.5.2.3	CO-60	SCAQC-7923-LD1	-0.004 ± 0.013	0.004 ± 0.013	0.007	0.805
DOE 4.5.2.3	CO-60	SCAQC-7921-LD1	0.006 ± 0.015	4.0e-05 ± 0.015	0.006	0.536
DOE 4.5.2.3	CO-60	SCAQC-7924-LD1	0.002 ± 0.013	0.008 ± 0.013	0.005	0.567
DOE 4.5.2.3	CO-60	SCAQC-7922-LD1	0.015 ± 0.021	-0.006 ± 0.016	0.022	1.64
DOE 4.5.2.3	RH-101	SCAQC-7924-LD1	-0.011 ± 0.016	0.002 ± 0.016	0.013	1.19
DOE 4.5.2.3	RH-101	SCAQC-7922-LD1	-0.002 ± 0.020	-0.005 ± 0.017	0.003	0.246
DOE 4.5.2.3	RH-101	SCAQC-7921-LD1	-0.007 ± 0.016	0.007 ± 0.016	0.014	1.24
DOE 4.5.2.3	RH-101	SCAQC-7923-LD1	-0.011 ± 0.015	-0.003 ± 0.016	0.009	0.779
DOE 4.5.2.3	SB-125	SCAQC-7923-LD1	-0.032 ± 0.038	0.004 ± 0.039	0.036	1.31

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Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah
Matrix: Soil
Laboratory Code: SCA

DOE 4.5.2.3	SB-125	SCAQC-7922-LD1	-0.029	± 0.054	0.003	± 0.041	0.031	0.922
DOE 4.5.2.3	SB-125	SCAQC-7924-LD1	0.008	± 0.038	-0.046	± 0.038	0.054	2.03
DOE 4.5.2.3	SB-125	SCAQC-7921-LD1	0.006	± 0.039	-0.019	± 0.042	0.025	0.875
DOE 4.5.2.3	CS-137	SCAQC-7924-LD1	0.060	± 0.028	0.061	± 0.031	7.5e-04	0.036
DOE 4.5.2.3	CS-137	SCAQC-7921-LD1	0.169	± 0.043	0.167	± 0.036	0.003	0.092
DOE 4.5.2.3	CS-137	SCAQC-7923-LD1	0.198	± 0.042	0.197	± 0.041	8.0e-04	0.027
DOE 4.5.2.3	CS-137	SCAQC-7922-LD1	0.003	± 0.023	0.003	± 0.018	3.1e-04	0.021
DOE 4.5.2.3	EU-155	SCAQC-7924-LD1	0.066	± 0.058	0.008	± 0.057	0.058	1.42
DOE 4.5.2.3	EU-155	SCAQC-7923-LD1	0.083	± 0.056	0.099	± 0.079	0.016	0.333
DOE 4.5.2.3	EU-155	SCAQC-7922-LD1	0.076	± 0.069	0.112	± 0.065	0.035	0.750
DOE 4.5.2.3	EU-155	SCAQC-7921-LD1	0.064	± 0.057	0.066	± 0.056	0.002	0.054
DOE 4.5.2.3	TL-208	SCAQC-7923-LD1	0.322	± 0.056	0.297	± 0.054	0.025	0.639
DOE 4.5.2.3	TL-208	SCAQC-7922-LD1	0.351	± 0.067	0.367	± 0.065	0.016	0.345
DOE 4.5.2.3	TL-208	SCAQC-7924-LD1	0.336	± 0.060	0.379	± 0.065	0.043	0.973
DOE 4.5.2.3	TL-208	SCAQC-7921-LD1	0.346	± 0.060	0.356	± 0.064	0.009	0.212
DOE 4.5.2.3	PO-209	SCAQC-7923-LD1	0.580	± 2.68	1.50	± 2.74	0.924	0.483
DOE 4.5.2.3	PO-209	SCAQC-7921-LD1	-0.326	± 2.70	-0.408	± 2.85	0.083	0.042
DOE 4.5.2.3	PO-209	SCAQC-7924-LD1	-1.78	± 2.81	-0.694	± 2.50	1.08	0.575
DOE 4.5.2.3	PO-209	SCAQC-7922-LD1	-0.529	± 4.18	0.428	± 2.82	0.957	0.380
DOE 4.5.2.3	BI-211	SCAQC-7922-LD1	-0.224	± 0.599	-0.021	± 0.462	0.203	0.536
DOE 4.5.2.3	BI-211	SCAQC-7921-LD1	0.094	± 0.441	-0.474	± 0.441	0.568	1.82
DOE 4.5.2.3	BI-211	SCAQC-7924-LD1	-0.098	± 0.473	-0.437	± 0.416	0.338	1.07
DOE 4.5.2.3	BI-211	SCAQC-7923-LD1	0.016	± 0.391	0.033	± 0.402	0.017	0.059
DOE 4.5.2.3	BI-212	SCAQC-7921-LD1	0.840	± 0.237	0.740	± 0.242	0.100	0.592
DOE 4.5.2.3	BI-212	SCAQC-7923-LD1	0.554	± 0.216	0.514	± 0.241	0.041	0.252
DOE 4.5.2.3	BI-212	SCAQC-7924-LD1	0.648	± 0.218	0.690	± 0.250	0.042	0.253
DOE 4.5.2.3	BI-212	SCAQC-7922-LD1	0.602	± 0.357	0.764	± 0.273	0.162	0.721
DOE 4.5.2.3	PB-212	SCAQC-7922-LD1	1.08	± 0.150	1.06	± 0.145	0.014	0.134
DOE 4.5.2.3	PB-212	SCAQC-7924-LD1	0.985	± 0.134	1.03	± 0.140	0.042	0.435
DOE 4.5.2.3	PB-212	SCAQC-7921-LD1	0.956	± 0.131	0.958	± 0.130	0.002	0.018
DOE 4.5.2.3	PB-212	SCAQC-7923-LD1	0.940	± 0.129	0.916	± 0.125	0.024	0.270
DOE 4.5.2.3	BI-214	SCAQC-7922-LD1	0.493	± 0.112	0.564	± 0.117	0.072	0.884
DOE 4.5.2.3	BI-214	SCAQC-7923-LD1	0.681	± 0.119	0.650	± 0.117	0.030	0.365
DOE 4.5.2.3	BI-214	SCAQC-7924-LD1	0.530	± 0.106	0.518	± 0.100	0.012	0.159
DOE 4.5.2.3	BI-214	SCAQC-7921-LD1	0.731	± 0.126	0.702	± 0.122	0.028	0.323
DOE 4.5.2.3	PB-214	SCAQC-7924-LD1	0.520	± 0.092	0.551	± 0.090	0.031	0.476
DOE 4.5.2.3	PB-214	SCAQC-7923-LD1	0.720	± 0.113	0.695	± 0.109	0.026	0.325
DOE 4.5.2.3	PB-214	SCAQC-7922-LD1	0.599	± 0.105	0.593	± 0.105	0.006	0.077
DOE 4.5.2.3	PB-214	SCAQC-7921-LD1	0.807	± 0.121	0.772	± 0.117	0.034	0.410
DOE 4.5.2.3	RA-223	SCAQC-7921-LD1	0.408	± 0.147	0.362	± 0.128	0.046	0.470
DOE 4.5.2.3	RA-223	SCAQC-7924-LD1	0.369	± 0.111	0.383	± 0.144	0.014	0.156
DOE 4.5.2.3	RA-223	SCAQC-7923-LD1	0.264	± 0.107	0.280	± 0.144	0.016	0.181
DOE 4.5.2.3	RA-223	SCAQC-7922-LD1	0.419	± 0.169	0.403	± 0.161	0.016	0.141
DOE 4.5.2.3	AC-228	SCAQC-7922-LD1	1.25	± 0.220	1.21	± 0.192	0.049	0.335
DOE 4.5.2.3	AC-228	SCAQC-7921-LD1	1.03	± 0.176	1.06	± 0.185	0.037	0.289

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah
Matrix: Soil
Laboratory Code: SCA

DOE 4.5.2.3	AC-228	SCAQC-7923-LD1	1.06	± 0.164	1.01	± 0.180	0.049	0.403
DOE 4.5.2.3	AC-228	SCAQC-7924-LD1	1.21	± 0.206	1.19	± 0.191	0.016	0.114
DOE 4.5.2.3	PA-233	SCAQC-7924-LD1	0.020	± 0.027	0.015	± 0.027	0.006	0.297
DOE 4.5.2.3	PA-233	SCAQC-7922-LD1	-0.022	± 0.036	-0.015	± 0.029	0.007	0.287
DOE 4.5.2.3	PA-233	SCAQC-7921-LD1	0.022	± 0.028	-0.007	± 0.027	0.029	1.51
DOE 4.5.2.3	PA-233	SCAQC-7923-LD1	0.013	± 0.025	-0.013	± 0.026	0.026	1.43
DOE 4.5.2.3	PA-234M	SCAQC-7924-LD1	1.25	± 1.61	-0.706	± 1.62	1.95	1.71
DOE 4.5.2.3	PA-234M	SCAQC-7922-LD1	0.816	± 2.36	0.706	± 1.79	0.111	0.075
DOE 4.5.2.3	PA-234M	SCAQC-7921-LD1	0.667	± 1.69	0.897	± 1.78	0.230	0.188
DOE 4.5.2.3	PA-234M	SCAQC-7923-LD1	1.54	± 1.51	0.529	± 1.54	1.01	0.935
DOE 4.5.2.3	TH-234	SCAQC-7923-LD1	0.892	± 0.416	1.34	± 0.430	0.449	1.50
DOE 4.5.2.3	TH-234	SCAQC-7924-LD1	1.19	± 0.399	1.38	± 0.453	0.193	0.640
DOE 4.5.2.3	TH-234	SCAQC-7921-LD1	1.27	± 0.455	1.09	± 0.418	0.172	0.557
DOE 4.5.2.3	TH-234	SCAQC-7922-LD1	1.30	± 0.478	1.22	± 0.503	0.086	0.248
DOE 4.5.2.3	U-235	SCAQC-7924-LD1	0.032	± 0.098	0.106	± 0.100	0.074	1.05
DOE 4.5.2.3	U-235	SCAQC-7921-LD1	-0.007	± 0.100	0.069	± 0.104	0.076	1.05
DOE 4.5.2.3	U-235	SCAQC-7922-LD1	-0.031	± 0.123	0.066	± 0.108	0.097	1.19
DOE 4.5.2.3	U-235	SCAQC-7923-LD1	0.050	± 0.098	-0.005	± 0.097	0.055	0.798
DOE 4.5.2.3	NP-236	SCAQC-7923-LD1	0.008	± 0.033	0.023	± 0.033	0.015	0.655
DOE 4.5.2.3	NP-236	SCAQC-7924-LD1	0.052	± 0.036	0.048	± 0.036	0.003	0.128
DOE 4.5.2.3	NP-236	SCAQC-7921-LD1	0.034	± 0.034	0.017	± 0.034	0.018	0.744
DOE 4.5.2.3	NP-236	SCAQC-7922-LD1	0.047	± 0.038	0.042	± 0.036	0.004	0.165
DOE 4.5.2.3	NP-237	SCAQC-7922-LD1	0.299	± 0.137	0.285	± 0.186	0.015	0.125
DOE 4.5.2.3	NP-237	SCAQC-7923-LD1	0.380	± 0.149	0.516	± 0.172	0.136	1.20
DOE 4.5.2.3	NP-237	SCAQC-7924-LD1	0.472	± 0.183	0.609	± 0.213	0.136	0.972
DOE 4.5.2.3	NP-237	SCAQC-7921-LD1	0.568	± 0.212	0.313	± 0.155	0.255	1.94
DOE 4.5.2.3	NP-239	SCAQC-7924-LD1	-0.018	± 0.097	-0.025	± 0.102	0.007	0.099
DOE 4.5.2.3	NP-239	SCAQC-7921-LD1	-0.044	± 0.105	0.017	± 0.101	0.061	0.838
DOE 4.5.2.3	NP-239	SCAQC-7922-LD1	0.085	± 0.131	-0.024	± 0.112	0.109	1.26
DOE 4.5.2.3	NP-239	SCAQC-7923-LD1	0.077	± 0.099	0.011	± 0.096	0.066	0.955
DOE 4.5.2.3	AM-241	SCAQC-7921-LD1	-0.047	± 0.092	-0.046	± 0.094	0.001	0.016
DOE 4.5.2.3	AM-241	SCAQC-7924-LD1	0.055	± 0.094	-0.120	± 0.092	0.175	2.66
DOE 4.5.2.3	AM-241	SCAQC-7923-LD1	-0.032	± 0.089	0.032	± 0.082	0.064	1.06
DOE 4.5.2.3	AM-241	SCAQC-7922-LD1	0.012	± 0.042	-0.006	± 0.099	0.017	0.317
DOE 4.5.2.3	AM-243	SCAQC-7921-LD1	0.231	± 0.069	0.195	± 0.062	0.037	0.791
DOE 4.5.2.3	AM-243	SCAQC-7923-LD1	0.202	± 0.060	0.155	± 0.047	0.046	1.22
DOE 4.5.2.3	AM-243	SCAQC-7922-LD1	0.204	± 0.057	0.205	± 0.062	7.0e-04	0.017
DOE 4.5.2.3	AM-243	SCAQC-7924-LD1	0.189	± 0.059	0.212	± 0.065	0.024	0.538
DOE 4.5.2.3	CM-243	SCAQC-7924-LD1	0.030	± 0.052	0.017	± 0.052	0.014	0.376
DOE 4.5.2.3	CM-243	SCAQC-7923-LD1	0.030	± 0.051	0.014	± 0.055	0.016	0.436
DOE 4.5.2.3	CM-243	SCAQC-7921-LD1	-7.8e-04	± 0.052	0.017	± 0.051	0.018	0.499
DOE 4.5.2.3	CM-243	SCAQC-7922-LD1	0.069	± 0.062	0.030	± 0.058	0.039	0.907
DOE 4.5.2.3	AM-246	SCAQC-7923-LD1	0.017	± 0.043	0.014	± 0.047	0.002	0.077
DOE 4.5.2.3	AM-246	SCAQC-7921-LD1	0.031	± 0.044	0.081	± 0.055	0.050	1.41
DOE 4.5.2.3	AM-246	SCAQC-7924-LD1	0.029	± 0.046	0.034	± 0.047	0.005	0.140

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7921_7924

Project Name: Cabrera Services-Oah
Matrix: Soil
Laboratory Code: SCA

DOE 4.5.2.3	AM-246	SCAQC-7922-LD1	-0.060	± 0.065	0.029	± 0.052	0.088	2.11
DOE 4.5.2.3	CF-249	SCAQC-7924-LD1	0.002	± 0.017	-0.011	± 0.017	0.013	1.09
DOE 4.5.2.3	CF-249	SCAQC-7921-LD1	-0.005	± 0.018	0.002	± 0.018	0.007	0.541
DOE 4.5.2.3	CF-249	SCAQC-7923-LD1	-0.001	± 0.017	0.011	± 0.017	0.012	1.02
DOE 4.5.2.3	CF-249	SCAQC-7922-LD1	-0.011	± 0.022	-0.010	± 0.019	0.001	0.082

SAMPLE AND QC RESULTS SUMMARY

GPL Laboratories, LLLP
Frederick, MD

Analytical Report For 710030

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.

Pat Hubschen

Reviewed By,
Project Manager

Approved By,
Laboratory Director

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

Thirty-six soil samples were received on 10/04/2007. 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

Thirty-six 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-2155-ST, and SB-CZ-SS-2161-SD for lead. They were within the control limits.

Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.

All GPL QA/QC criteria were met.

Pat Hackerson

Reviewed By,
Project Manager

Approved By,
Laboratory Director

Sample Summary Report

SC&A, Inc.

Work Order: 710030

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
SB-CZ-SS-2155-SD	710030-016-016-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2155-ST	710030-001-001-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2156-SD	710030-017-017-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2156-ST	710030-002-002-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2157-SD	710030-018-018-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2157-ST	710030-003-003-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2158-SD	710030-019-019-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2158-ST	710030-004-004-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2159-SD	710030-020-020-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2159-ST	710030-005-005-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2160-SD	710030-021-021-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2160-ST	710030-006-006-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2161-SD	710030-022-022-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2161-ST	710030-007-007-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2162-SD	710030-023-023-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2162-ST	710030-008-008-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2163-SD	710030-024-024-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2163-ST	710030-009-009-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2164-SD	710030-025-025-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2164-ST	710030-010-010-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2165-SD	710030-026-026-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2165-ST	710030-011-011-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2166-SD	710030-027-027-1/1	SW6010C	SOIL	09/24/2007	10/04/2007

Sample Summary Report

SC&A, Inc.

Work Order: 710030

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
SB-CZ-SS-2166-ST	710030-012-012-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2167-SD	710030-028-028-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2167-ST	710030-014-014-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2168-SD	710030-029-029-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2168-ST	710030-015-015-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2169-SD	710030-034-034-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2169-ST	710030-030-030-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2170-SD	710030-035-035-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2170-ST	710030-031-031-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2171-SD	710030-036-036-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2171-ST	710030-032-032-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2172-SD	710030-037-037-1/1	SW6010C	SOIL	09/24/2007	10/04/2007
SB-CZ-SS-2172-ST	710030-033-033-1/1	SW6010C	SOIL	09/24/2007	10/04/2007

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2155-ST	Lab Sample ID:	710030-001-001-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**28.9**	**D**	**8.8**	**10**	**mg/kg**	**10/15/07**	**13:49**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2156-ST	Lab Sample ID:	710030-002-002-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**103**	**D**	**8.7**	**10**	**mg/kg**	**10/15/07**	**14:35**

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2157-ST	Lab Sample ID:	710030-003-003-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**368**	**D**	**8.8**	**10**	**mg/kg**	**10/15/07**	**14:45**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2158-ST	Lab Sample ID:	710030-004-004-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**77.3**	**D**	**7.8**	**10**	**mg/kg**	**10/15/07**	**14:54**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2159-ST	Lab Sample ID:	710030-005-005-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**85.3**	**D**	**7.9**	**10**	**mg/kg**	**10/15/07**	**15:25**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2160-ST	Lab Sample ID:	710030-006-006-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**85.1**	**D**	**8.1**	**10**	**mg/kg**	**10/15/07**	**15:34**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2161-ST	Lab Sample ID:	710030-007-007-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**56.2**	**D**	**7.8**	**10**	**mg/kg**	**10/15/07**	**15:43**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2162-ST	Lab Sample ID:	710030-008-008-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**178**	**D**	**8.7**	**10**	**mg/kg**	**10/15/07**	**15:53**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2163-ST	Lab Sample ID:	710030-009-009-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**76.3**	**D**	**8.1**	**10**	**mg/kg**	**10/15/07**	**16:02**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2164-ST	Lab Sample ID:	710030-010-010-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**40.7**	**D**	**8.3**	**10**	**mg/kg**	**10/15/07**	**16:12**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2165-ST	Lab Sample ID:	710030-011-011-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**29.8**	**D**	**7.9**	**10**	**mg/kg**	**10/15/07**	**16:21**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2166-ST	Lab Sample ID:	710030-012-012-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**23.7**	**D**	**8.6**	**10**	**mg/kg**	**10/15/07**	**16:30**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2167-ST	Lab Sample ID:	710030-014-014-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**46.4**	**D**	**8.8**	**10**	**mg/kg**	**10/15/07**	**16:39**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2168-ST	Lab Sample ID:	710030-015-015-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**24.3**	**D**	**8.3**	**10**	**mg/kg**	**10/15/07**	**16:49**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2155-SD	Lab Sample ID:	710030-016-016-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**18.4**	**D**	**8.8**	**10**	**mg/kg**	**10/15/07**	**17:20**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2156-SD	Lab Sample ID:	710030-017-017-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**300**	**D**	**8.5**	**10**	**mg/kg**	**10/15/07**	**17:29**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2157-SD	Lab Sample ID:	710030-018-018-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**168**	**D**	**8.7**	**10**	**mg/kg**	**10/15/07**	**17:39**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2158-SD	Lab Sample ID:	710030-019-019-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**82.2**	**D**	**7.6**	**10**	**mg/kg**	**10/15/07**	**17:48**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2159-SD	Lab Sample ID:	710030-020-020-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**29.2**	**D**	**8.8**	**10**	**mg/kg**	**10/15/07**	**17:58**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2160-SD	Lab Sample ID:	710030-021-021-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 10:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**29.4**	**D**	**7.7**	**10**	**mg/kg**	**10/15/07**	**18:07**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2161-SD	Lab Sample ID:	710030-022-022-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**25.2**	**D**	**8.6**	**10**	**mg/kg**	**10/15/07**	**19:00**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2162-SD	Lab Sample ID:	710030-023-023-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**48.6**	**D**	**8.3**	**10**	**mg/kg**	**10/15/07**	**19:46**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2163-SD	Lab Sample ID:	710030-024-024-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**30.5**	**D**	**8.4**	**10**	**mg/kg**	**10/15/07**	**19:56**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2164-SD	Lab Sample ID:	710030-025-025-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**23.3**	**D**	**8.5**	**10**	**mg/kg**	**10/15/07**	**20:05**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2165-SD	Lab Sample ID:	710030-026-026-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**18.7**	**D**	**8.5**	**10**	**mg/kg**	**10/15/07**	**20:55**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2166-SD	Lab Sample ID:	710030-027-027-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**21.4**	**D**	**8.5**	**10**	**mg/kg**	**10/15/07**	**21:04**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2167-SD	Lab Sample ID:	710030-028-028-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**19.8**	**D**	**8.2**	**10**	**mg/kg**	**10/15/07**	**21:14**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2168-SD	Lab Sample ID:	710030-029-029-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**18.6**	**D**	**8.8**	**10**	**mg/kg**	**10/15/07**	**21:23**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2169-ST	Lab Sample ID:	710030-030-030-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**44.7**	**D**	**8.1**	**10**	**mg/kg**	**10/15/07**	**21:32**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2170-ST	Lab Sample ID:	710030-031-031-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**27.9**	**D**	**8.2**	**10**	**mg/kg**	**10/15/07**	**21:42**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2171-ST	Lab Sample ID:	710030-032-032-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**31.5**	**D**	**8.6**	**10**	**mg/kg**	**10/15/07**	**21:51**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2172-ST	Lab Sample ID:	710030-033-033-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**49.9**	**D**	**7.9**	**10**	**mg/kg**	**10/15/07**	**22:00**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2169-SD	Lab Sample ID:	710030-034-034-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**26.7**	**D**	**8.7**	**10**	**mg/kg**	**10/15/07**	**22:10**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2170-SD	Lab Sample ID:	710030-035-035-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**36.6**	**D**	**8.1**	**10**	**mg/kg**	**10/15/07**	**22:19**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2171-SD	Lab Sample ID:	710030-036-036-1/1
Sample Date/Time:	09/24/2007 10:32	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**12.7**	**D**	**9**	**10**	**mg/kg**	**10/15/07**	**22:50**

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2172-SD	Lab Sample ID:	710030-037-037-1/1
Sample Date/Time:	09/24/2007 10:40	Percent Moisture:	NA
Receipt Date/Time:	10/04/2007 10:11	Preparation Method:	SW3050B
Prepared Date/Time:	10/08/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time	
1)	**Lead**	**36.0**	**D**	**8.4**	**10**	**mg/kg**	**10/15/07**	**23:00**

GPL Laboratories, LLLP

Preparation Blank Results

Project:	710030	Matrix:	Soil
Lab Sample ID:	BLK100777	Percent Moisture:	0.0
Client Sample ID:	NA	Prep Batch:	100777
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	0.19	1.0	0.19	U	1	10/15/07 18:19

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

GPL Laboratories, LLLP

Preparation Blank Results

Project:	710030	Matrix:	Soil
Lab Sample ID:	BLK100842	Percent Moisture:	0.0
Client Sample ID:	NA	Prep Batch:	100842
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	0.19	1.0	0.19	U	1	10/15/07 13:30

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

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2155-ST MS	Lab Sample ID:	SP710030-001-001-1/1
Project:	710030	Instrument:	P3050
Units:	mg/kg	Data File Name:	071015.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 10/15/07 13:58	Sample Result 10/15/07 13:49	Spike Added	%R
Lead	117.32	28.91	84.03	105

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2161-SD MS	Lab Sample ID:	SP710030-022-022-1/1
Project:	710030	Instrument:	P3050
Units:	mg/kg	Data File Name:	071015.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 10/15/07 19:09	Sample Result 10/15/07 19:00	Spike Added	%R
Lead	111.96	25.24	85.47	101

GPL Laboratories, LLLP

Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2155-ST MSD	Lab Sample ID:	SD710030-001-001-1/1
Project:	710030	Instrument:	P3050
Units:	mg/kg	Data File Name:	071015.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 10/15/07 14:07	Sample Result 10/15/07 13:49	Spike Added	%R
Lead	112.36	28.91	81.97	102

GPL Laboratories, LLLP

Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2161-SD MSD	Lab Sample ID:	SD710030-022-022-1/1
Project:	710030	Instrument:	P3050
Units:	mg/kg	Data File Name:	071015.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 10/15/07 19:18	Sample Result 10/15/07 19:00	Spike Added	%R
Lead	114.48	25.24	82.64	108

GPL Laboratories, LLLP

Duplicates RPD

Client ID:	SB-CZ-SS-2155-ST MSD	Lab Sample ID:	SD710030-001-001-1/1
Project:	710030	Instrument:	P3050
Units:	mg/kg	Data File Name:	071015.ARC

Analyte	Matrix Spike ~~Original~~ Sample Results RA 10-18	Matrix Spike Duplicate Sample Results	RPD	Control Limit	Q
Lead	117.32	112.36	4	20	D

GPL Laboratories, LLLP

Duplicates RPD

Client ID:	SB-CZ-SS-2161-SD MSD	Lab Sample ID:	SD710030-022-022-1/1
Project:	710030	Instrument:	P3050
Units:	mg/kg	Data File Name:	071015.ARC

Analyte	Matrix Spike Original Sample Results RA 10-18	Matrix Spike Duplicate Sample Results	RPD	Control Limit	Q
Lead	111.96	114.48	2	20	D

GPL Laboratories, LLLP

Laboratory Control Sample

Project:	710030	Lab Sample ID:	BKS100842
Units:	mg/kg	Instrument:	P3050
		Data File Name:	071015.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 10/15/07 13:39	Spike Added	%R
Lead	100.96	100.00	101

GPL Laboratories, LLLP

Laboratory Control Sample

Project:	710030	Lab Sample ID:	BKS100777
Units:	mg/kg	Instrument:	P3050
		Data File Name:	071015.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 10/15/07 18:28	Spike Added	%R
Lead	99.09	100.00	99

Qualifier Definitions

SC&A, Inc.

Work Order: 710030

All Departments

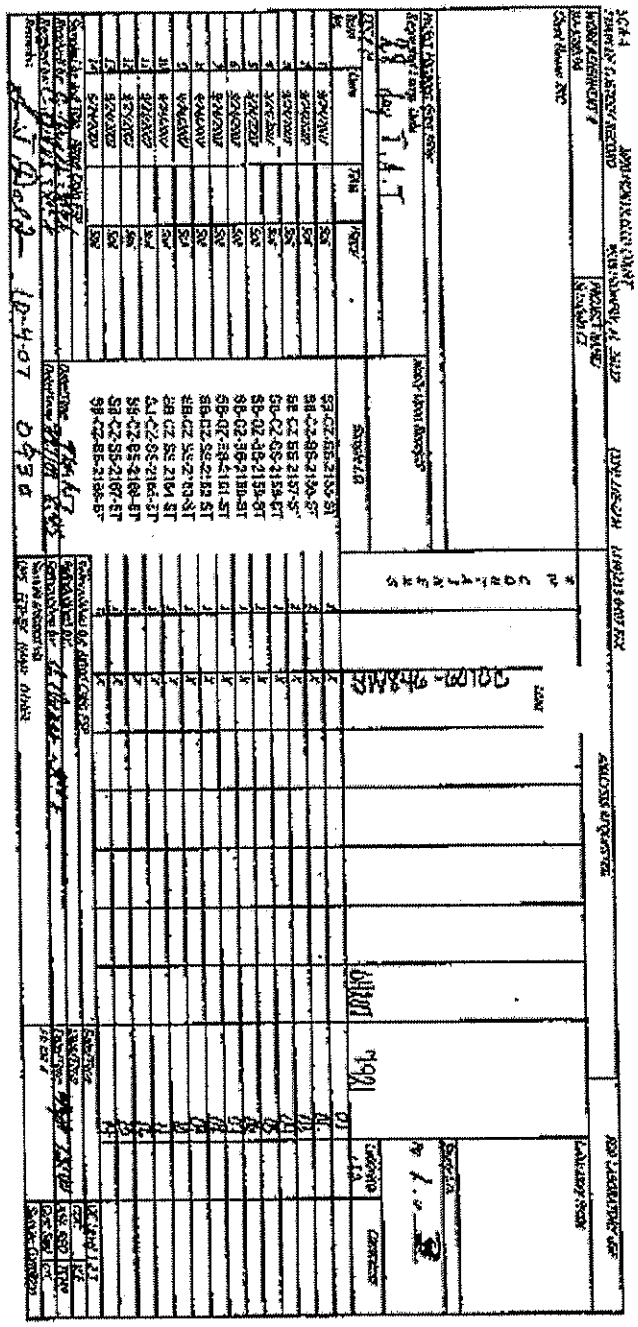
U	Indicates that the compound was analyzed for but not detected
BQL	Below Quantitation Limit

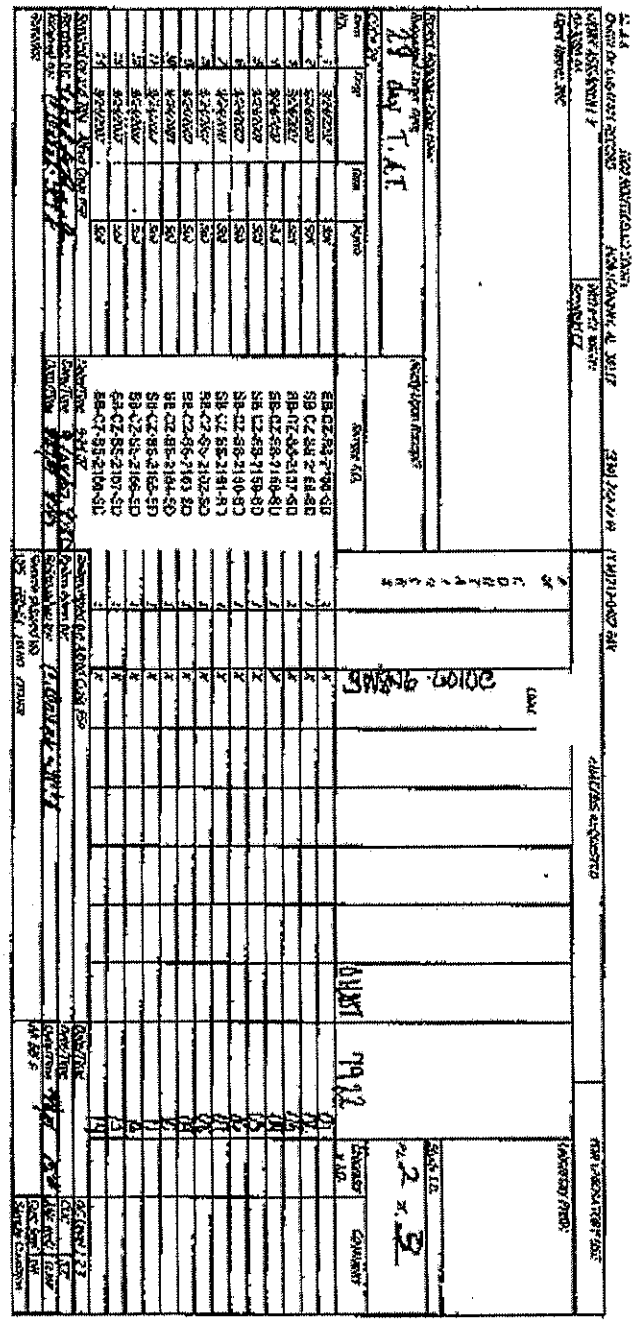
Organics

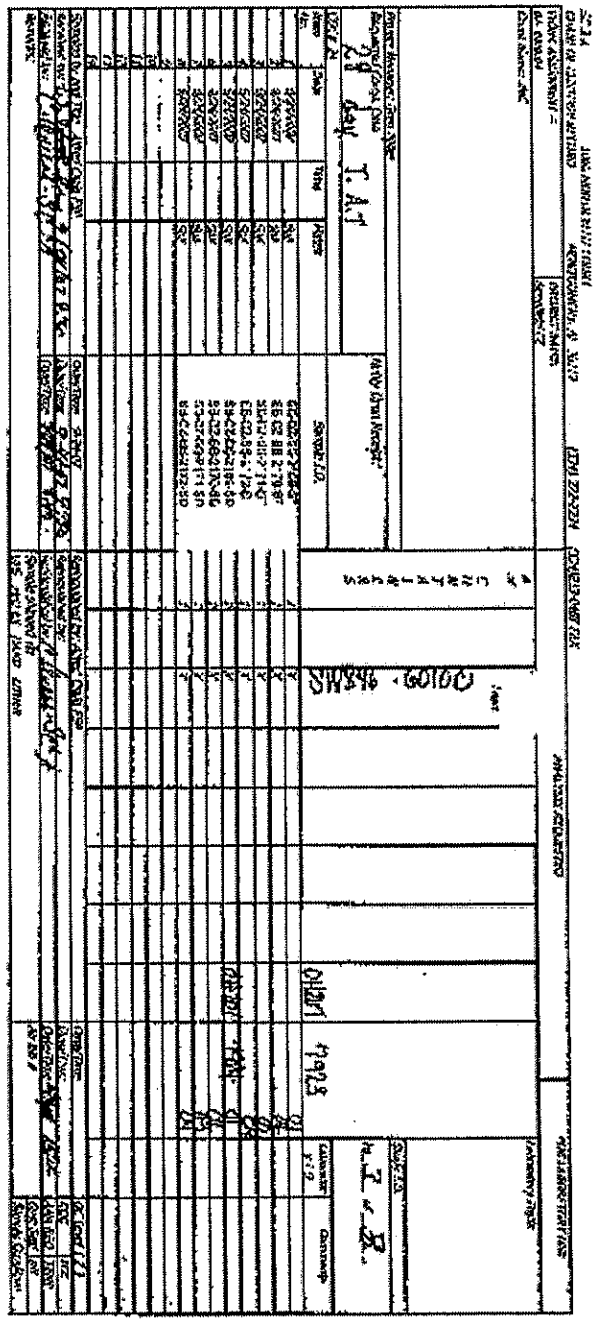
B	Indicates that the analyte was found in the associated blank as well as in the sample
D	Indicates that the analyte was reported from a diluted analysis
E	Indicates that the concentration detected exceeded the calibration range of the instrument
J	Value is less than the reporting limit but greater than 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







SC&A Laboratory Radiological Survey Results

Dose Rate Instrument - Gamma	
Instrument Mfg.	Ludlum
Model Number	19
Serial Number	51849

Alpha Survey Instrument			
Instrument Mfg.	Ludlum	Detector Mfg.	Ludlum
Model Number	16	Model Number	43-5
Serial Number	56585	Serial Number	PR 067187

Beta/Gamma Survey Instrument			
Instrument Mfg.	Ludlum	Detector Mfg.	Ludlum
Model Number	3	Model Number	44-9
Serial Number	120189	Serial Number	PR 067189

Maximum Permissible Limits For Unrestricted Use		
2200 dpm/100 cm² - Alpha (49 CFR 173.443)	2200 dpm/100 cm² - Beta (49 CFR 173.443)	0.5 mR/h - Gamma (49 CFR 173.422)
Equivalent net cpm: Probe 43-5 16 cpm Probe 43-93 35 cpm	Equivalent net cpm: Probe 44-9 50 cpm Probe 44-94 270 cpm	>100µR/hr process in hood

Location	Time	Date	Gamma			Alpha			Beta/Gamma		
			Background cpm	Gross cpm	Net cpm	Background cpm	Gross cpm	Net cpm	Background cpm	Gross cpm	Net cpm
Airbill	1307	10/17									
Outside Cooler / Box											
Inside Cooler / Box											
Sample(s)			5	8	3	0	0	0	40	80	40
Airbill											
Outside Cooler / Box											
Inside Cooler / Box											
Sample(s)											
Airbill											
Outside Cooler / Box											
Inside Cooler / Box											
Sample(s)											
Airbill											
Outside Cooler / Box											
Inside Cooler / Box											
Sample(s)											

Surveyed by: RCleveland

SC&A - Southeastern Environmental Laboratory
SCA-Form 301-3 Rev 1

Chain of Custody

SC&A, Inc.

SDG: 710030

FedEx | Ship Manager | Label 798278276181 Page 1 of 1

From: Origin ID: MGMA (334)272-2294
Angie Lewis
SC&A, Inc.
1000 Randolph Ct.
Montgomery AL 36117

Ship Date: 03OCT07
ActWgt: 5 LB
System#: 5038622/INET7001
Account#: S ********

Delivery Address Bar Code

SHIP TO: (301)694-5310 BILL SENDER
Pat Huebschman
GPL Laboratories
7210A Corporate Court

Frederick, MD 21703

Ref# FOAI 121.
Invoice #
PO #
Dept #

THU - 04OCT A2
TRK# 0201 7982 7827 6181 PRIORITY OVERNIGHT

XC-FDKA

IAD
MD-US
21703

Shipping Label: Your shipment is complete
1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available at fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

https://www.fedex.com/ship/domesticShipmentAction.do?method=doProcessShipment 10/3/2007

GPL Laboratories, LLLP

Figure
SAMPLE RECEIPT CHECKLIST

W.O. No: 710030 | Carrier Name: Fed-Ex

Client Name: SC&A | Received (Logged In) By: LJP / 10-4-07 (Initials / Date)

Date Received: 10-4-07 | Project:

Time Received: 0930 | Site:

Received By: Steve. | VOA Holding Bank I.D. No:

	YES	NO		YES	NO
Air Bill/Manifest Present?	✓		Trip Blanks: No. of Sets		✓
No. 7988 7827 6181			Field Blanks: No. of Sets		✓
Shipping Container in Good Condition?	✓		Equip. Blanks: No. of Sets		✓
Custody Seals Present on Shipping Container?	✓		Field Duplicate: No. of Sets		✓
Condition: Broken			MS/MSD: No. of Sets		✓
Intact: Signed or Signed			VOA Vials have Zero Headspace?	✓	
Intact: Dated and Signed	✓		If no, smaller or greater than a Green Pea (see comments)		
Usage of Tamper Evident Tape		✓	Preservatives Added to Samples?		✓
Chain-of-Custody Present?	✓		pH Check Required? Performed By?		✓
Chain-of-Custody Agrees with Sample Labels?	✓		Ice Present in Shipping Container?		✓
Chain-of-Custody Signed?	✓				
Packing Present in Shipping Container?	✓				
Type of Packing: Ziploc					
Custody seals on Sample Bottles?		✓			
Condition: Good					
Broken					

Container #	Temp.	Container #	Temp.
1			
L79			

Total Number of Sample Bottles: 36

Total Number of Samples: 36

Samples Intact? ✓

Sufficient Sample Volume for Indicated Test? ✓

Project Manager Contacted?
Name: PM
Date Contacted: 10-4-07

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked "N/A"

COMMENTS:

Checklist Completed By: L J Pahl

Date: 10-4-07

SOP No: F-2V18

PREPARATION LOGS

SC&A, Inc.
Southeastern Environmental Laboratory

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: 04207 Sample Matrix: Soil SOP No.: 302

Sample Batch Number: 7921

Balance I.D. 1137

Sample Number	Approximate Weight or Volume of Sample Received (g-wet of L) g-wet	Initials Date
01	1128.6	CD 2/7/01
02	1353.3	
03	1256.1	
04	1347.6	
05	1143.5	
06	1219.2	
07	1118.2	
08	964.4	
09	1069.2	
10	1346.4	
11	1244.9	
12	1214.9	
13	1242.6	
14	1241.9	

SC&A - Southeastern Environmental Laboratory
SCA-Form 302-1 Rev. 0

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: 04207 Sample Matrix: Soil SOP No.: 302

Sample Batch Number: 7922

Balance I.D. 1138

Sample Number	Approximate Weight or Volume of Sample Received (g-wet of L) g-wet	Initials Date
01	1049.6	VD 2/7/07
02	1482.7	
03	1310.9	
04	1257.8	
05	1418.7	
06	1219.4	
07	1156.4	
08	1155.9	
09	1255.6	
10	1113.2	
11	1254.2	
12	1066.8	
13	1232.1	
14	1080.8	

SC&A - Southeastern Environmental Laboratory
SCA-Form 302-1 Rev. 0

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: OH201 Sample Matrix: Soil SOP No.: 382

Sample Batch Number: 7923

Balance I.D. 1138

Sample Number	Approximate Weight or Volume of Sample Received (g-wet of L) g-wet	Initials Date
01	1189.3	CD 9/27/01
02	1023.1	
03	818.3	
04	1219.2	

SC&A - Southeastern Environmental Laboratory
SCA-Form 302-1 Rev. 0

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: OH207 Sample Matrix: Soil SOP No.: 302

Sample Batch Number: 7924

Balance I.D. 1138

Sample Number	Approximate Weight or Volume of Sample Received (g-wet of L) g-wet	Initials Date
01	1207.8	CW 9/27/07
02	1048.5	↓
03	851.1	
04	1367.2	

SC&A - Southeastern Environmental Laboratory
SCA-Form 302-1 Rev. 0

PREPARATION SUMMARY

Gamma Spectrometry Liquid or Solid Preparation Log

Sample Prefix: UH207
Sample Batch Number: 7921
Balance I.D.: 1138

Sample Matrix: Soil
Sample Geometry: 400 ml

SOP No.: 302
Date: 10-7-07

Sample Number	Total Sample Used for Gamma Analysis (g, g-wet, g-dry, mL, L) g-dry	Initials/Date
01	483.0	UB 10/10/07
02	520.5	↓
03	521.0	
04	490.3	
05	500.5	
06	479.5	
07	461.8	
08	456.0	
09	438.8	
10	491.6	
11	490.8	
12	476.7	
13	466.2	
14	500.7	↓

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

PREPARATION SUMMARY

Gamma Spectrometry Liquid or Solid Preparation Log

Sample Prefix: 011207
Sample Batch Number: 7922
Balance I.D.: 1138

Sample Matrix: Soil
Sample Geometry: 400 ml

SOP No.: 302
Date: 10-3-07

Sample Number	Total Sample Used for Gamma Analysis (g, g-wet, g-dry, mL, L) g-dry	Initials/Date
01	397.6	CD 10/3/07
02	519.3	
03	555.1	
04	480.0	
05	516.8	
06	509.6	
07	460.7	
08	478.5	
09	524.7	
10	441.0	
11	543.8	
12	478.7	
13	553.2	
14	434.8	

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

PREPARATION SUMMARY

Gamma Spectrometry Liquid or Solid Preparation Log

Sample Prefix: OH207
Sample Batch Number: 7923
Balance I.D.: 1138

Sample Matrix: Soil
Sample Geometry: 400 ml

SOP No.: 302
Date: 10-3-07

Sample Number	Total Sample Used for Gamma Analysis (g, g-wet, g-dry, mL, L) g-dry	Initials/Date
01	484.9	CD 10/3/07
02	479.8	"
03	352.2	"
04	470.2	"

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

PREPARATION SUMMARY

Gamma Spectrometry Liquid or Solid Preparation Log

Sample Prefix: 014207
Sample Batch Number: 7924
Balance I.D.: 1138

Sample Matrix: Soil
Sample Geometry: 400 ml

SOP No.: 302
Date: 10-3-07

Sample Number	Total Sample Used for Gamma Analysis (g, g-wet, g-dry, mL, L) g-dry	Initials/Date
01	452.9	CD 10/3/07
02	463.3	"
03	317.7	"
04	493.8	"

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

PREPARATION LOGS

GPL Laboratories, LLLP
Frederick, MD

GPL Laboratories, LLLP

Preparation Log

Project: 710030 Instrument: P3050

Prep Method: Batch Number: 100777

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK100777	BLK100777	10/08/2007	1.00	100
BKS100777	BKS100777	10/08/2007	1.00	100
S 710030-022-022-1/1	SB-CZ-SS-2161-SD	10/08/2007	1.16	100
SP710030-022-022-1/1	SB-CZ-SS-2161-SD MS	10/08/2007	1.17	100
S 710030-023-023-1/1	SB-CZ-SS-2162-SD	10/08/2007	1.20	100
S 710030-024-024-1/1	SB-CZ-SS-2163-SD	10/08/2007	1.19	100
S 710030-025-025-1/1	SB-CZ-SS-2164-SD	10/08/2007	1.18	100
S 710030-026-026-1/1	SB-CZ-SS-2165-SD	10/08/2007	1.17	100
S 710030-027-027-1/1	SB-CZ-SS-2166-SD	10/08/2007	1.18	100
S 710030-028-028-1/1	SB-CZ-SS-2167-SD	10/08/2007	1.22	100
S 710030-029-029-1/1	SB-CZ-SS-2168-SD	10/08/2007	1.14	100
S 710030-034-034-1/1	SB-CZ-SS-2169-SD	10/08/2007	1.15	100
S 710030-030-030-1/1	SB-CZ-SS-2169-ST	10/08/2007	1.23	100
S 710030-035-035-1/1	SB-CZ-SS-2170-SD	10/08/2007	1.23	100
S 710030-031-031-1/1	SB-CZ-SS-2170-ST	10/08/2007	1.22	100
S 710030-036-036-1/1	SB-CZ-SS-2171-SD	10/08/2007	1.11	100
S 710030-032-032-1/1	SB-CZ-SS-2171-ST	10/08/2007	1.16	100
S 710030-037-037-1/1	SB-CZ-SS-2172-SD	10/08/2007	1.19	100
S 710030-033-033-1/1	SB-CZ-SS-2172-ST	10/08/2007	1.26	100
SD710030-022-022-1/1	SB-CZ-SS-2161-SD MSD	10/08/2007	1.21	100

GPL Laboratories, LLLP

Preparation Log

Project: 710030 Instrument: P3050

Prep Method: Batch Number: 100842

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK100842	BLK100842	10/08/2007	1.00	100
BKS100842	BKS100842	10/08/2007	1.00	100
S 710030-016-016-1/1	SB-CZ-SS-2155-SD	10/08/2007	1.14	100
S 710030-001-001-1/1	SB-CZ-SS-2155-ST	10/08/2007	1.14	100
SP710030-001-001-1/1	SB-CZ-SS-2155-ST MS	10/08/2007	1.19	100
S 710030-017-017-1/1	SB-CZ-SS-2156-SD	10/08/2007	1.17	100
S 710030-002-002-1/1	SB-CZ-SS-2156-ST	10/08/2007	1.15	100
S 710030-018-018-1/1	SB-CZ-SS-2157-SD	10/08/2007	1.15	100
S 710030-003-003-1/1	SB-CZ-SS-2157-ST	10/08/2007	1.14	100
S 710030-019-019-1/1	SB-CZ-SS-2158-SD	10/08/2007	1.31	100
S 710030-004-004-1/1	SB-CZ-SS-2158-ST	10/08/2007	1.28	100
S 710030-020-020-1/1	SB-CZ-SS-2159-SD	10/08/2007	1.14	100
S 710030-005-005-1/1	SB-CZ-SS-2159-ST	10/08/2007	1.26	100
S 710030-021-021-1/1	SB-CZ-SS-2160-SD	10/08/2007	1.30	100
S 710030-006-006-1/1	SB-CZ-SS-2160-ST	10/08/2007	1.23	100
S 710030-007-007-1/1	SB-CZ-SS-2161-ST	10/08/2007	1.29	100
S 710030-008-008-1/1	SB-CZ-SS-2162-ST	10/08/2007	1.15	100
S 710030-009-009-1/1	SB-CZ-SS-2163-ST	10/08/2007	1.24	100
S 710030-010-010-1/1	SB-CZ-SS-2164-ST	10/08/2007	1.20	100
S 710030-011-011-1/1	SB-CZ-SS-2165-ST	10/08/2007	1.27	100
S 710030-012-012-1/1	SB-CZ-SS-2166-ST	10/08/2007	1.16	100
S 710030-014-014-1/1	SB-CZ-SS-2167-ST	10/08/2007	1.14	100
S 710030-015-015-1/1	SB-CZ-SS-2168-ST	10/08/2007	1.20	100
SD710030-001-001-1/1	SB-CZ-SS-2155-ST MSD	10/08/2007	1.22	100

Metals Preparation & Sample Description Log

Date: 10-08-07 Prep: 200.7 / 3005A / 3020A / (3050B) / 3010A / ILC03.1 / ILM04.1 / ILM05.3 Batch No.: 198175

Analyst: MD Comments: HOT BLOCK DIGESTION (Soil)

Reviewed by: RA Date: 10-16-07 Spike Witness: Pep. Seq: 100842

	GPL Work Order No.	Sample	Frac	Size mL (g)	Final Vol. (mL)	Matrix S, W Other	Color Before	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
							R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.				
1	BLK	175		1.00	100	S				clear	✓
2	BKS	175		1.00	"	"				"	✓
3	710030	001	-001-i	1.14		Soil	Brown	yellow	Mod		✓
4		MS	"	1.19							
5		MSD	↓	1.22							
6		002	-002-i	1.15							
7		003	-003-i	1.14							
8		004	-004-i	1.28							
9		005	-005-i	1.26							
10		006	-006-i	1.23							
11		007	-007-i	1.29							
12		008	-008-i	1.15							
13		009	-009-i	1.24							
14		010	-010-i	1.20							
15		011	-011-i	1.27							
16		012	-012-i	1.16							
17		014	-014-i	1.14							
18		015	-015-i	1.20							
19		016	-016-i	1.14							
20		017	-017-i	1.17							
21		018	-018-i	1.15							
22		019	-019-i	1.31							
23		020	-020-i	1.14							
24		021	-021-i	1.30	↓	↓	↓	↓	MH	10-08-07	↓

LCS ID/ Amt. Added (ml,g): 0.2 ml (40822, 40828, 40829) HNO3(1+1) ID: GP-057-159-04

Spiking ID / Amt. Added (ml): 0.2 ml (40822, 40828, 40829) HNO3(conc) ID: 129-11-08

HCl(conc) ID: 129-11-07

Temperature C: 94° HCl(1+1) ID: ✓

Peroxide ID: 129-10-12

GPL Laboratories, LLLP

Document Control No: GP_M_198

Metals Preparation & Sample Description Log

Date: 10-5-2007 Prep: 200.7 / 3005A / 3020A / (3050B) / 3010A / ILC03.1 / ILM04.1 / ILM05.3 Batch No.: 198-176

Analyst: D S S. Comments: MOD BLOCK DIGESTION (SOIL)

Reviewed by: JM Date: 10-16-07 Spike Witness: MH Pep. Seq: 100777

	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	176		1.00	100	S	(0)			Clear	—
2	BKS	171					(0)			"	—
3	710030	029	022 1/4	1.16			Aeropin	Yellow	Medium		—
4		MS		1.17							—
5		MSD	✓	1.21							
6		023	023 1/4	1.20							
7		024	024 1/4	1.19							
8		025	025 1/4	1.18							
9		026	026 1/4	1.17							
10		027	027 1/4	1.18							
11		028	028 1/4	1.22							
12		029	029 1/4	1.14							
13		030	030 1/4	1.23							
14		031	031 1/4	1.22							
15		032	032 1/4	1.16							
16		033	033 1/4	1.26							
17		034	034 1/4	1.15							
18		035	035 1/4	1.23							
19		036	036 1/4	1.11							
20	✓	037	037 1/4	1.19							
21	710040	001	001 1/4	1.37	✓	✓	10 ✓	✓	✓	✓	✓
22											
23			D S S - 10-8-2007								
24											

LCS ID/ Amt. Added (ml,g): 0.2ml (40827 40828 40829)

Spiking ID / Amt. Added (ml): 0.2ml (40827, 40828 40829)

10 ml 1:1 HNO_3, 10 ml HNO_3 conc, 7 ml H_2O_2, 10ml HCl/HF

Temperature C: / 94°C

HNO3(1+1) ID: GP. 05)-157-09

HNO3(conc) ID: GP. 129-11-08

HCl(conc) ID: GP. 129-11-07

HCl(1+1) ID: —

Peroxide ID: GP 152 of 152-12

SOIL PERMITS

Soil Permit

Permit Number: S-76792

UNITED STATES DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

Plant Protection and Quarantine

Issued To:

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

TELEPHONE: (334) 272-2234

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

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).

PPQ FORM 525B (8/94)

PART 1 - PERMITTEE

Soil Permit

Permit Number: S-73685

UNITED STATES DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

Plant Protection and Quarantine

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

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:

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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).

PPQ FORM 525B (8/94)

PART 1 - PERMITTEE

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

S-142

ANALYTICS

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

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

67834-301

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

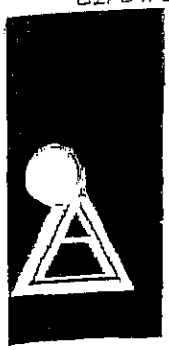
ISOTOPE	GAMMA-RAY ENERGY	HALF-LIFE		GAMMA-RAYS PER SECOND	TOTAL UNCERTAINTY %
Am-241	59.5	432	y	658.4	3.0
Cd-109	88	462.6	d	934.5	3.3
Co-57	122	271.79	d	543.4	3.0
Ce-139	166	137.6	d	734.4	2.8
Hg-203	279	46.61	d	1645	2.7
Sn-113	392	115.1	d	959.6	2.6
Cs-137	662	30.07	y	632.3	3.0
Y-88	898	106.6	d	2461	2.6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

Q A APPROVED: 4-5-04

This standard will expire one year after the calibration date.



ANALYTICS

5142-150

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.

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

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

5142

MIXED GAMMA IN 400mL SAND IN 500mL PLASTIC CONTAINER

RECEIVED: 04.07.2004

SUPPLIER: ANALYTICS

SOURCE ID: 67834-301

ACTIVITY: 1.01 μCi 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

4/19/04

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 ~~dpm~~ pCi/~~ml~~ Sample

Measurement Results

Measurement (n)	Concentration (x) (pCi/Sample)	Difference $(\Delta x_n)^a$	$(\Delta x_n)^2$
1	32,540	520	270,400
2	31,800	220	48,400
3	31,720	290	84,100
4			
5			
Mean	32,020 pCi/Sample		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 ~~dpm~~ pCi/~~ml~~ Sample) 2.8%

Two Standard Deviations (2σ) = 900 ~~dpm~~ pCi/~~ml~~ Sample

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

Concentration Verified ✓ not Verified _____

Comments: _____

Signature R. Blanchard

VERIFICATION OF
STANDARD CONCENTRATION

Standard I.D. No. 5142 Isotope Mixed Gamma (109Cd) Date 6-08-07

Certificate Concentration of Standard as Diluted 678,945 ~~dpm~~ pCi/~~ml~~ sample

Measurement Results

Measurement (n)	Concentration (x) (pCi/sample)	Difference $(\Delta x_n)^a$	$(\Delta x_n)^2$
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 pCi/sample		Σ 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 ~~dpm~~ pCi/~~ml~~ sample) 6.6%

Two Standard Deviations (2σ) = 46,000 ~~dpm~~ pCi/~~ml~~ sample

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

Concentration Verified ✓ not Verified _____

Comments: _____

Signature R. Blanchard

VERIFICATION OF
STANDARD CONCENTRATION

Standard I.D. No. 5142 Isotope Mixed Gamma (^{137}Cs) Date 6-08-07

Certificate Concentration of Standard as Diluted 20,081 ~~dpm~~ pCi/~~ml~~ Sample

Measurement Results

Measurement (n)	Concentration (x) (pCi/sample)	Difference $(\Delta x_n)^a$	$(\Delta x_n)^2$
1	21,880	850	722,500
2	21,200	170	28,900
3	20,000	1030	1,060,900
4			
5			
Mean	21,030 pCi/sample		Σ 1,812,200

[a] $\Delta x_n = (\bar{x} - x_n)$.

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

Mean Concentration = 21,030 ~~dpm~~ pCi/~~ml~~ Sample) 9.0%

Two Standard Deviations (2σ) = 1,900 ~~dpm~~ pCi/~~ml~~ sample

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

Concentration Verified ✓ not Verified _____

Comments: _____

Signature R. Blanchard

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:	9/27/2007	Client Project Manager:	Greg Miller
SC&A Project Manager:			
S7921 7924			

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7921-PB ✓		9/27/2007 8:45:00 AM	
SCAQC	7921-LD1 ✓ OH207-7921-01	SB-CZ-SS-2155-ST	9/24/2007	
SCAQC	7921-LC1 ✓		9/27/2007 8:45:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7921-01 ✓	SB-CZ-SS-2155-ST	9/24/2007	
OH207	7921-02 ✓	SB-CZ-SS-2156-ST	9/24/2007	
OH207	7921-03 ✓	SB-CZ-SS-2157-ST	9/24/2007	
OH207	7921-04 ✓	SB-CZ-SS-2158-ST	9/24/2007	
OH207	7921-05 ✓	SB-CZ-SS-2159-ST	9/24/2007	
OH207	7921-06 ✓	SB-CZ-SS-2160-ST	9/24/2007	
OH207	7921-07 ✓	SB-CZ-SS-2161-ST	9/24/2007	
OH207	7921-08 ✓	SB-CZ-SS-2162-ST	9/24/2007	
OH207	7921-09 ✓	SB-CZ-SS-2163-ST	9/24/2007	
OH207	7921-10 ✓	SB-CZ-SS-2164-ST	9/24/2007	
OH207	7921-11 ✓	SB-CZ-SS-2165-ST	9/24/2007	
OH207	7921-12 ✓	SB-CZ-SS-2166-ST	9/24/2007	
OH207	7921-13 ✓	SB-CZ-SS-2167-ST	9/24/2007	
OH207	7921-14 ✓	SB-CZ-SS-2168-ST	9/24/2007	

Radiochemistry Reviewer 11/07/07 Date

QA Reviewer 11/07/2007 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
11-2-07 2057 / G2 IC	180	OH207	7910	11	—	9-12-07	SB-CZ-55-2021-BD	Soil	391.8 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-2-07 2057 / G3 IC				12	—		2022-BD		467.3 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-2-07 2358 / G1 IC				13	—		2023-BD		448.0 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-2-07 2359 / G2 IC				14	—		2024-BD		354.8 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-2-07 2359 / G3 IC				15	—		2025-BD		431.4 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-3-07 1145 / G1 IC				16	—		2026-BD		383.3 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-3-07 1145 / G2 IC				17	—		2027-BD		446.2 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-3-07 1145 / G3 IC				18	—		2028-BD		393.0 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-3-07 1441 / G1 IC	180	SCDQC	7921	PB1	—	9-27-07 0845	PREP BLK	Liquid	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐
11-3-07 1841 / G2 IC	60	SCDQC	7921	LC1	—		CTRL SAMP S-142	Soil	640 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ / 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ / 10 mL Sand ☐ 200 mL Sand ☐

gamma1 = G1
gamma2 = G2

SC&A - Southeastern Environmental Laboratory
SCA-Form 012 Rev. 1

Page 157

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
11-3-04 1443 G2 IC	180	SCAQC	7921	LD1	–	9-24-07	DUP 7921-01	SOIL	483.0 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-3-04 1838 G1 IC	180	OH207		01	–		SB-CZ-SS-2155-ST		483.01 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-3-04 1444 G3 IC				02	–		2156-ST		520.5 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-3-04 1842 G3 IC				03	–		2157-ST		521.0 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-3-04 2055 G1 IC				04	–		2158-ST		490.3 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-3-04 2055 G2 IC				05	–		2159-ST		500.5 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-3-04 2256 G3 IC				06	–		2160-ST		479.5 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 0156 G1 IC				07	–		2161-ST		411.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 0157 G2 IC				08	–		2162-ST		436.0 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 0157 G3 IC				09	–		2163-ST		438.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐

anode1 = G1
anode2 = G2

Page 158

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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
11-4-07 1037 G1	180	OH207	7921	10	–	9-24-07	SB-CZ-SS-2164-ST	SOIL	491.6 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1040 G2				11	–		2165-ST		490.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1041 G3				12	–		2166-ST		476.7 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1250 G1 IC				13	–		2167-ST		460.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1250 G2 IC				14	–		2168-ST		500.7 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1251 G3 IC	180	SCAQC	7922	PB1	–	9-27-07 0845	PREP BLK	LIQUID	400g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 2000 G1 IC	60			LCS1	–		CTRLSAMP S-142	SOIL	640g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1600 G1	180			LD1	–	9-24-07	DUP 7922-01	SOIL	397.6 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 2000 G3 IC		OH207		D1	–		SB-CZ-SS-2155-SD		397.6 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1605 G2		OH207		D2	–		2156-SD		519.3 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐

alpha1 = G1
alpha2 = G2

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 3-NOV-2007 17:42:11

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7921PB1_GAMMA1_400MLSA_16971.CNF

---- Sample Information ----

Sample ID	: SCAQC-7921-PB1		
Sample Title	: PREP BLANK		
Sample Quantity	: 4.00000E+02 G		
Sample Type	: LIQUID		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16971		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 3-NOV-2007 14:41:53.
Decay time	: 37 05:56:53.62	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.24

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	511.15*	69	60	2.44	1022.73	1014	19	74.4	0.00E+00	
0	609.27*	40	29	1.50	1219.16	1212	13	69.8		
0	1100.44	11	8	0.89	2202.45	2198		8109.7		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	511.15	69	60	2.44	1022.73	1014	19	6.42E-03	74.4	1.47E+00	T
0	609.27	40	29	1.50	1219.16	1212	13	3.70E-03	69.8	1.29E+00	T
0	1100.44	11	8	0.89	2202.45	2198	8	9.99E-04	****	8.59E-01	

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	-3.893E-02		1.153E-01	2.197E-01	1.499E-02	-0.177
CO-60	1.338E-03		8.611E-03	1.635E-02	9.977E-04	0.082
RH-101	-5.838E-03		1.023E-02	1.695E-02	2.629E-03	-0.344
SB-125	2.411E-02		2.621E-02	5.001E-02	4.101E-03	0.482
CS-137	9.074E-03		9.747E-03	1.961E-02	2.107E-03	0.463
EU-155	-1.612E-03		3.349E-02	5.800E-02	5.759E-03	-0.028
TL-208	-5.477E-04		1.135E-02	2.036E-02	2.043E-03	-0.027
PO-209	-1.094E-01		1.860E+00	3.399E+00	6.083E-01	-0.032
BI-211	1.288E-01		2.530E-01	4.969E-01	3.620E-02	0.259
BI-212	4.787E-02		7.744E-02	1.506E-01	1.448E-02	0.318
PB-212	7.688E-03		1.818E-02	3.161E-02	2.439E-03	0.243
BI-214	4.211E-02	+	2.970E-02	4.481E-02	4.564E-03	0.940
PB-214	1.839E-02		2.142E-02	3.972E-02	3.135E-03	0.463
RA-223	2.518E-02		4.604E-02	8.568E-02	7.884E-03	0.294
AC-228	1.555E-03		3.747E-02	7.025E-02	3.882E-03	0.022
PA-233	8.279E-03		1.855E-02	3.404E-02	2.858E-03	0.243
PA-234M	2.236E-01		1.212E+00	2.253E+00	1.295E-01	0.099
TH-234	-5.600E-02		1.939E-01	3.510E-01	4.096E-02	-0.160
U-235	-4.415E-02		6.243E-02	1.002E-01	6.996E-03	-0.441
NP-236	1.057E-02		1.883E-02	3.395E-02	3.729E-03	0.311
NP-237	-1.750E-02		7.179E-02	1.238E-01	1.790E-02	-0.141
NP-239	6.461E-02		6.530E-02	1.158E-01	1.562E-02	0.558
AM-241	2.577E-03		5.323E-02	9.535E-02	7.580E-03	0.027
AM-243	2.990E-03		1.785E-02	3.164E-02	6.637E-03	0.095
CM-243	5.966E-03		2.876E-02	5.083E-02	5.792E-03	0.117
AM-246	-1.023E-02		3.074E-02	5.371E-02	6.611E-03	-0.191
CF-249	-3.565E-03		1.072E-02	1.851E-02	1.786E-03	-0.193

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 3-NOV-2007 21:42:33

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7921LC1_GAMMA2_400MLSA_16975.CNF

---- Sample Information ----

Sample ID	: SCAQC-7921-LC1		
Sample Title	: CTRL SAMP S-142		
Sample Quantity	: 6.40000E+02 G		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16975		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 3-NOV-2007 18:41:47.
Decay time	: 37 09:56:47.29	% dead time	: 0.3%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:28.78

---- 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:

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

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	59.37	83864	33738	1.05	118.47	112	12	1.1		AM-241
0	88.00*	33264	18413	1.11	175.47	169	13	2.0		PB-214
0	122.07	5514	11384	1.07	243.30	239	10	7.7		
0	136.54	1046	7460	0.97	272.12	269	7	28.1		
0	238.72*	989	7624	1.12	475.63	472	8	31.3		
0	295.44*	313	4244	1.13	588.61	587	6	67.0		PB-214
0	352.27*	513	5604	1.44	701.86	698	9	53.4		PB-214
0	583.36*	423	2616	1.31	1162.49	1159	8	43.2		
0	609.67*	549	2708	1.71	1214.96	1211	9	35.3		
0	661.78	80320	4517	1.50	1318.89	1311	15	0.8		CS-137
0	1172.85	61671	2574	1.86	2339.06	2330	18	0.9		CO-60
0	1331.83	56204	762	1.96	2656.73	2647	20	0.9		CO-60
0	1460.66*	96	161	1.68	2914.28	2908	13	60.5		K-40
0	1762.81*	79	162	0.75	3518.71	3511	17	77.3		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	122.07	5514	11384	1.07	243.30	239	10	5.11E-01	7.7	3.30E+00	
0	136.54	1046	7460	0.97	272.12	269	7	9.68E-02	28.1	3.38E+00	
0	238.72	989	7624	1.12	475.63	472	8	9.16E-02	31.3	2.80E+00	T
0	583.36	423	2616	1.31	1162.49	1159	8	3.91E-02	43.2	1.35E+00	T
0	609.67	549	2708	1.71	1214.96	1211	9	5.09E-02	35.3	1.30E+00	T
0	1762.81	79	162	0.75	3518.71	3511	17	7.35E-03	77.3	5.84E-01	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.193E-01	3.158E-01	2.948E-01	1.898E-02	1.762
CO-60	3.089E+01	1.729E+00	5.495E-02	3.196E-03	562.197
CS-137	3.041E+01	3.468E+00	9.523E-02	1.083E-02	319.323
PB-214	2.572E-01	1.388E-01	1.653E-01	1.267E-02	1.556
AM-241	8.096E+01	5.388E+00	5.630E-01	3.693E-02	143.797

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

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
RH-101	-1.033E-02		4.419E-02	7.009E-02	1.094E-02	-0.147
SB-125	9.049E-02		1.561E-01	2.571E-01	2.108E-02	0.352
EU-155	-7.118E-02		1.459E-01	2.381E-01	2.229E-02	-0.299
TL-208	1.450E-01	+	6.439E-02	9.408E-02	9.797E-03	1.541
PO-209	-1.362E+01		1.496E+01	2.403E+01	4.607E+00	-0.567
BI-211	3.063E-01		1.786E+00	2.972E+00	2.909E-01	0.103
BI-212	-1.219E-01		4.209E-01	7.032E-01	7.688E-02	-0.173
PB-212	3.189E-01	+	1.026E-01	1.346E-01	1.029E-02	2.369
BI-214	3.581E-01	+	1.320E-01	1.770E-01	1.885E-02	2.023
RA-223	1.865E-01		2.400E-01	4.058E-01	3.611E-02	0.460
AC-228	3.768E-01		2.821E-01	4.689E-01	4.075E-02	0.803
PA-233	4.827E-02		9.075E-02	1.523E-01	1.226E-02	0.317
PA-234M	-7.128E+00		8.351E+00	1.349E+01	1.053E+00	-0.528
TH-234	3.111E-01		7.004E-01	1.042E+00	1.042E-01	0.299
U-235	1.115E-01		2.559E-01	4.151E-01	3.030E-02	0.269
NP-236	-1.238E-02		8.392E-02	1.379E-01	1.371E-02	-0.090
NP-237	2.199E+01		2.804E+00	9.566E-01	1.202E-01	22.987
NP-239	-7.660E-02		2.966E-01	5.023E-01	6.779E-02	-0.152
AM-243	-4.307E-03		8.043E-02	1.336E-01	2.664E-02	-0.032
CM-243	2.337E-02		1.337E-01	2.198E-01	2.376E-02	0.106
AM-246	1.117E-01		2.582E-01	4.223E-01	5.401E-02	0.264
CF-249	4.106E-02		6.188E-02	1.026E-01	9.828E-03	0.400

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 3-NOV-2007 17:44:49

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7921LD1_GAMMA2_400MLSA_16972.CNF

---- Sample Information ----

Sample ID	: SCAQC-7921-LD1		
Sample Title	: DUP 7921-01		
Sample Quantity	: 4.83000E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16972		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 3-NOV-2007 14:44:34.
Decay time	: 40 14:44:34.25	% 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	62.99*	138	1043	1.72	125.68	120	11	93.0		TH-234
3	74.80	499	848	1.31	149.19	142	17	22.4	1.23E+00	AM-243
										PB-214
										PB-212
3	77.10	759	607	1.00	153.76	142	17	12.8		PB-214
										PB-212
2	86.93*	186	611	1.06	173.34	164	19	46.8	2.26E+00	NP-237
										PB-214
										PB-212
2	89.95*	232	724	1.18	179.35	164	19	40.4		
0	92.96*	308	837	1.36	185.34	182	8	35.5		TH-234
0	186.26*	368	838	1.29	371.14	366	11	32.9		
0	209.51	170	670	0.99	417.43	413	9	57.2		AC-228
4	238.76*	2242	376	1.11	475.70	468	19	5.2	2.02E+00	PB-212
4	241.65	503	577	1.79	481.47	468	19	25.2		PB-214
0	270.38*	246	381	1.54	538.69	534	10	32.7		RA-223
										AC-228
2	295.45*	739	231	1.25	588.63	582	21	10.2	2.45E+00	PB-214
2	300.08	152	280	1.55	597.86	582	21	43.7		PB-212
0	328.06	152	353	1.31	653.60	649	11	50.4		
0	338.50*	437	361	1.27	674.40	670	10	19.0		AC-228
0	352.17*	1163	305	1.24	701.65	696	11	8.4		PB-214
0	410.58	137	248	2.15	818.05	812	12	49.5		AC-228
0	463.33	132	191	1.49	923.19	919	10	43.1		AC-228
0	510.99*	220	332	1.74	1018.21	1011	16	41.6		TL-208
0	583.42*	782	203	1.45	1162.61	1156	15	10.7		TL-208
0	609.57*	813	164	1.53	1214.77	1209	11	9.4		BI-214
0	661.69	332	116	1.33	1318.70	1314	10	15.8		CS-137
0	727.29	190	136	1.53	1449.57	1443	13	29.2		BI-212
0	768.07	79	168	1.97	1530.92	1524	13	71.7		BI-214
0	795.06	90	87	1.07	1584.78	1580	11	45.3		AC-228
0	859.98*	98	68	2.27	1714.33	1709	12	39.5		TL-208
0	911.13*	504	68	1.69	1816.43	1809	13	11.3		AC-228
1	964.60	141	42	1.93	1923.17	1913	29	25.1	1.83E+00	AC-228
1	968.85*	344	39	1.82	1931.65	1913	29	13.0		AC-228
0	1120.27*	192	87	1.42	2234.03	2226	16	26.4		BI-214
0	1237.93	76	61	1.28	2469.07	2463	11	46.1		BI-214
0	1377.75	86	29	1.56	2748.51	2741	17	36.2		BI-214
0	1459.84*	841	40	2.10	2912.64	2904	20	7.9		K-40
0	1591.82*	28	24	1.81	3176.58	3172	10	79.3		
0	1629.57	27	18	1.22	3252.11	3245	15	80.2		
0	1762.95*	141	29	2.06	3518.99	3510	16	24.4		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.95	232	724	1.18	179.35	164	19	2.15E-02	40.4	2.61E+00	
0	186.26	368	838	1.29	371.14	366	11	3.41E-02	32.9	3.21E+00	
0	328.06	152	353	1.31	653.60	649	11	1.41E-02	50.4	2.20E+00	
0	1591.82	28	24	1.81	3176.58	3172	10	2.56E-03	79.3	6.33E-01	
0	1629.57	27	18	1.22	3252.11	3245	15	2.48E-03	80.2	6.21E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.057E+00	6.184E-01	1.994E-01	1.283E-02	30.379
CS-137	1.667E-01	3.240E-02	2.894E-02	3.293E-03	5.758
TL-208	3.556E-01	5.321E-02	2.452E-02	2.553E-03	14.501
BI-212	7.396E-01	2.305E-01	2.018E-01	2.207E-02	3.665
PB-212	9.577E-01	8.837E-02	4.205E-02	3.213E-03	22.776
BI-214	7.023E-01	9.989E-02	5.023E-02	5.349E-03	13.980
PB-214	7.722E-01	8.757E-02	5.078E-02	3.894E-03	15.206
RA-223	3.617E-01	1.225E-01	1.319E-01	1.174E-02	2.742
AC-228	1.064E+00	1.518E-01	9.108E-02	7.914E-03	11.686
TH-234	1.094E+00	4.030E-01	4.307E-01	4.308E-02	2.540
NP-237	3.132E-01	1.518E-01	2.155E-01	2.708E-02	1.453
AM-243	1.948E-01	5.839E-02	4.715E-02	9.399E-03	4.131

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	4.013E-05		1.498E-02	2.266E-02	1.318E-03	0.002
RH-101	7.358E-03		1.647E-02	2.694E-02	4.207E-03	0.273
SB-125	-1.938E-02		4.182E-02	6.909E-02	5.664E-03	-0.281
EU-155	6.612E-02		5.603E-02	9.616E-02	9.004E-03	0.688
PO-209	-4.085E-01		2.849E+00	4.907E+00	9.408E-01	-0.083
BI-211	-4.738E-01		4.389E-01	7.013E-01	6.865E-02	-0.676
PA-233	-7.253E-03		2.681E-02	4.551E-02	3.665E-03	-0.159
PA-234M	8.968E-01		1.780E+00	3.211E+00	2.506E-01	0.279
U-235	6.919E-02		1.040E-01	1.730E-01	1.262E-02	0.400
NP-236	1.671E-02		3.382E-02	5.727E-02	5.693E-03	0.292
NP-239	1.694E-02		1.014E-01	1.763E-01	2.379E-02	0.096
AM-241	-4.567E-02		9.370E-02	1.407E-01	9.227E-03	-0.325
CM-243	1.736E-02		5.112E-02	8.618E-02	9.317E-03	0.201
AM-246	8.136E-02		5.485E-02	1.037E-01	1.327E-02	0.784
CF-249	1.537E-03		1.774E-02	3.026E-02	2.899E-03	0.051

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 3-NOV-2007 21:40:40

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792101_GAMMA1_400MLSAN_16974.CNF

---- Sample Information ----

Sample ID	: OH207-7921-01		
Sample Title	: SB-CZ-SS-2155-ST		
Sample Quantity	: 4.83000E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16974		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 3-NOV-2007 18:40:22.
Decay time	: 40 18:40:22.62	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:02.86

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.96	509	640	1.12	149.34	142	18	18.8	1.47E+00	AM-243
										PB-214
										PB-212
2	77.27*	743	536	1.01	153.96	142	18	12.5		PB-214
										PB-212
3	87.29	298	701	1.27	174.03	165	25	33.0	3.56E+00	NP-237
										PB-214
										PB-212
3	90.10	215	699	1.28	179.65	165	25	45.3		
3	92.89*	320	698	1.28	185.24	165	25	32.5		
0	129.29	128	748	1.02	258.13	254	9	78.6		AC-228
0	186.01*	305	734	1.24	371.71	367	10	35.8		
0	209.04	211	599	1.00	417.82	414	10	45.4		AC-228
1	238.67*	2124	329	1.09	477.15	470	17	5.2	4.23E+00	PB-212
1	241.06	247	350	1.25	481.94	470	17	39.1		
1	241.98	273	303	1.11	483.77	470	17	27.2		PB-214
0	270.02	264	421	1.49	539.92	534	12	33.5		RA-223
										AC-228
0	295.19	649	350	1.12	590.32	585	10	13.3		PB-214
0	299.94	111	308	0.92	599.83	596	8	58.4		PB-212
0	328.56	126	371	1.31	657.13	651	11	61.9		
0	338.26*	433	377	1.19	676.56	671	11	19.9		AC-228
0	351.87*	1165	268	1.28	703.81	699	10	7.9		PB-214
0	409.52	86	200	0.85	819.24	815	9	63.6		AC-228
0	462.82	132	197	1.34	925.94	921	11	44.7		AC-228
0	510.54*	276	215	1.76	1021.49	1013	16	28.9		TL-208
0	583.06*	752	162	1.50	1166.70	1161	12	10.1		TL-208
0	609.11*	838	167	1.48	1218.84	1213	14	9.6		BI-214
0	661.37	336	184	1.46	1323.48	1316	15	20.7		CS-137
0	726.88	217	109	1.44	1454.62	1448	14	24.5		BI-212
0	767.94	83	102	1.26	1536.83	1532	11	51.3		BI-214
0	794.83	101	93	1.01	1590.65	1585	12	43.2		AC-228
0	860.11	122	84	2.00	1721.36	1715	15	37.3		TL-208
0	910.82*	497	100	1.46	1822.86	1815	16	12.8		AC-228
0	933.22	73	51	3.92	1867.71	1861	12	45.6		BI-214
1	964.43	77	87	1.73	1930.18	1926	23	44.5	2.44E+00	AC-228
1	968.72*	309	71	1.71	1938.77	1926	23	15.7		AC-228
0	1051.12	41	68	3.93	2103.73	2095	17	98.4		
0	1119.92	182	75	1.76	2241.45	2234	13	24.6		BI-214
0	1237.36	103	77	0.89	2476.53	2467	16	42.6		BI-214
0	1401.09*	32	23	2.62	2804.25	2796	13	71.6		BI-214
0	1460.12*	872	29	2.14	2922.42	2914	19	7.4		K-40
0	1587.31	53	10	2.01	3176.98	3172	10	35.4		AC-228
0	1728.83	38	6	2.36	3460.22	3456	10	39.3		BI-214
0	1763.59*	160	12	1.96	3529.79	3521	16	18.9		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	90.10	215	699	1.28	179.65	165	25	1.99E-02	45.3	2.33E+00	
3	92.89	320	698	1.28	185.24	165	25	2.96E-02	32.5	2.43E+00	T
0	186.01	305	734	1.24	371.71	367	10	2.83E-02	35.8	3.03E+00	
1	241.06	247	350	1.25	481.94	470	17	2.29E-02	39.1	2.64E+00	
0	328.56	126	371	1.31	657.13	651	11	1.17E-02	61.9	2.10E+00	
0	1051.12	41	68	3.93	2103.73	2095	17	3.75E-03	98.4	8.85E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.991E+00	6.052E-01	2.155E-01	1.471E-02	27.799
CS-137	1.693E-01	3.944E-02	2.807E-02	3.017E-03	6.030
TL-208	3.463E-01	4.923E-02	2.593E-02	2.602E-03	13.357
BI-212	8.397E-01	2.211E-01	1.822E-01	1.752E-02	4.609
PB-212	9.560E-01	8.922E-02	4.073E-02	3.143E-03	23.471
BI-214	7.306E-01	1.022E-01	4.701E-02	4.789E-03	15.541
PB-214	8.067E-01	9.021E-02	4.927E-02	3.888E-03	16.372
RA-223	4.075E-01	1.414E-01	1.272E-01	1.171E-02	3.203
AC-228	1.027E+00	1.434E-01	8.944E-02	4.943E-03	11.482
NP-237	5.679E-01	2.045E-01	2.098E-01	3.034E-02	2.707
AM-243	2.314E-01	6.514E-02	5.018E-02	1.053E-02	4.612

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	5.774E-03		1.528E-02	2.488E-02	1.624E-03	0.232
RH-101	-6.968E-03		1.616E-02	2.625E-02	4.072E-03	-0.265
SB-125	5.669E-03		3.905E-02	6.740E-02	5.528E-03	0.084
EU-155	6.394E-02		5.677E-02	9.874E-02	9.803E-03	0.648
PO-209	-3.256E-01		2.701E+00	4.700E+00	8.413E-01	-0.069
BI-211	9.425E-02		4.409E-01	7.806E-01	5.687E-02	0.121
PA-233	2.184E-02		2.771E-02	4.940E-02	4.148E-03	0.442
PA-234M	6.668E-01		1.684E+00	3.020E+00	1.736E-01	0.221
TH-234	1.266E+00	+	4.370E-01	5.867E-01	6.845E-02	2.158
U-235	-6.995E-03		1.001E-01	1.657E-01	1.157E-02	-0.042
NP-236	3.448E-02		3.353E-02	5.827E-02	6.401E-03	0.592
NP-239	-4.432E-02		1.052E-01	1.684E-01	2.272E-02	-0.263
AM-241	-4.670E-02		9.173E-02	1.565E-01	1.244E-02	-0.298
CM-243	-7.832E-04		5.160E-02	8.738E-02	9.957E-03	-0.009
AM-246	3.137E-02		4.385E-02	8.166E-02	1.005E-02	0.384
CF-249	-5.207E-03		1.754E-02	2.969E-02	2.864E-03	-0.175

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 3-NOV-2007 17:46:13

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792102_GAMMA3_400MLSAN_16973.CNF

---- Sample Information ----

Sample ID	: OH207-7921-02		
Sample Title	: SB-CZ-SS-2156-ST		
Sample Quantity	: 5.20500E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16973		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 3-NOV-2007 14:45:46.
Decay time	: 40 14:45:46.50	% 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:

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

where:
$x = \ln(a1/energy)$

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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.12*	127	869	1.13	140.22	137	10	92.5		TH-234
1	74.88*	827	952	1.44	166.28	159	20	16.2	4.82E+00	AM-243
										PB-214
										PB-212
1	77.32*	1344	913	1.44	171.71	159	20	10.5		PB-214
										PB-212
2	87.26	466	842	1.37	193.73	183	29	24.3	1.21E+00	NP-237
										PB-214
										PB-212
2	89.91	287	912	1.43	199.61	183	29	42.3		
2	92.85*	488	886	1.44	206.12	183	29	26.4		TH-234
0	129.09	244	982	1.45	286.46	281	13	54.5		AC-228
0	185.92*	426	1078	1.67	412.43	405	16	36.4		
0	209.25	246	634	1.67	464.12	458	12	42.8		AC-228
2	238.74*	2049	469	1.43	529.49	524	17	6.1	1.66E+00	PB-212
2	241.86	527	381	1.68	536.40	524	17	16.8		PB-214
0	270.37	210	476	1.57	599.61	593	13	44.9		RA-223
										AC-228
0	295.38	744	497	1.54	655.04	648	13	14.4		PB-214
0	300.20	134	329	1.48	665.71	661	10	53.7		PB-212
0	338.32*	397	323	1.47	750.21	745	12	20.7		AC-228
0	352.07*	1342	364	1.46	780.70	772	18	8.7		PB-214
0	463.38	149	188	1.11	1027.39	1021	13	41.3		AC-228
0	510.88*	278	235	2.38	1132.68	1123	20	31.6		TL-208
0	583.28*	563	194	1.62	1293.14	1287	14	13.6		TL-208
0	609.41*	941	198	1.55	1351.05	1344	17	9.6		BI-214
0	661.62	375	145	1.44	1466.77	1458	15	17.4		CS-137
0	727.43	103	157	2.15	1612.62	1606	15	56.4		BI-212
0	768.69	90	130	1.91	1704.07	1697	14	58.4		BI-214
0	786.17	50	78	0.55	1742.83	1738	11	74.0		BI-212
0	796.23	79	129	2.09	1765.10	1754	18	71.7		AC-228
0	861.23	81	82	1.33	1909.18	1904	14	52.3		TL-208
0	911.45*	422	85	1.92	2020.47	2014	18	14.5		AC-228
0	934.06	71	44	1.98	2070.58	2064	12	44.5		BI-214
2	964.91	82	38	2.44	2138.94	2131	28	44.7	6.58E-01	AC-228
2	969.08	252	33	2.21	2148.19	2131	28	16.6		AC-228
0	1120.38*	222	88	2.07	2483.50	2473	21	25.3		BI-214
0	1377.92	91	27	2.40	3054.21	3043	22	36.2		BI-214
0	1461.02*	328	44	2.29	3238.35	3229	20	15.3		K-40
0	1729.64	51	8	0.91	3833.60	3826	16	37.4		BI-214
0	1764.50*	174	20	2.60	3910.84	3902	16	19.4		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.91	287	912	1.43	199.61	183	29	2.66E-02	42.3	3.55E+00	
0	185.92	426	1078	1.67	412.43	405	16	3.94E-02	36.4	2.82E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.654E+00	4.348E-01	2.341E-01	1.377E-02	11.339
CS-137	2.022E-01	3.814E-02	3.331E-02	2.398E-03	6.070
TL-208	2.739E-01	4.325E-02	2.858E-02	2.274E-03	9.583
BI-212	4.347E-01	2.472E-01	2.122E-01	1.540E-02	2.048
PB-212	9.471E-01	9.114E-02	4.867E-02	3.638E-03	19.460
BI-214	8.711E-01	1.067E-01	5.690E-02	4.335E-03	15.309
PB-214	9.583E-01	1.127E-01	5.558E-02	4.421E-03	17.244
RA-223	3.353E-01	1.533E-01	1.469E-01	1.301E-02	2.282
AC-228	9.784E-01	1.574E-01	9.720E-02	6.834E-03	10.066
TH-234	1.222E+00	3.405E-01	3.385E-01	3.031E-02	3.609
NP-237	5.090E-01	1.360E-01	1.471E-01	1.639E-02	3.461
AM-243	1.668E-01	4.200E-02	2.799E-02	5.382E-03	5.961

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-2.145E-03		1.640E-02	2.747E-02	1.456E-03	-0.078
RH-101	-1.363E-02		1.809E-02	2.961E-02	4.571E-03	-0.460
SB-125	1.259E-02		4.325E-02	7.617E-02	6.296E-03	0.165
EU-155	1.283E-02		5.008E-02	8.659E-02	8.142E-03	0.148
PO-209	1.891E-01		3.073E+00	5.494E+00	1.012E+00	0.034
BI-211	8.014E-02		4.859E-01	8.388E-01	6.041E-02	0.096
PA-233	-6.033E-03		3.274E-02	5.432E-02	4.433E-03	-0.111
PA-234M	2.135E+00		1.940E+00	3.663E+00	2.501E-01	0.583
U-235	8.306E-02		1.088E-01	1.882E-01	1.397E-02	0.441
NP-236	3.260E-02		3.094E-02	4.788E-02	4.569E-03	0.681
NP-239	7.499E-02		1.145E-01	1.960E-01	2.622E-02	0.383
AM-241	2.870E-02		3.403E-02	5.078E-02	3.213E-03	0.565
CM-243	-2.977E-02		4.539E-02	7.668E-02	8.263E-03	-0.388
AM-246	1.775E-02		5.588E-02	1.014E-01	1.280E-02	0.175
CF-249	1.329E-02		1.954E-02	3.483E-02	3.469E-03	0.381

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 3-NOV-2007 21:43:19

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792103_GAMMA3_400MLSAN_16976.CNF

---- Sample Information ----

Sample ID	: OH207-7921-03		
Sample Title	: SB-CZ-SS-2157-ST		
Sample Quantity	: 5.21000E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16976		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 3-NOV-2007 18:43:00.
Decay time	: 40 18:43:00.23	% 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	: 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.19*	157	880	1.11	140.38	136	10	75.9		TH-234
1	74.88*	854	976	1.44	166.29	158	20	16.1	2.80E+00	AM-243
										PB-214
										PB-212
1	77.14*	1191	803	1.19	171.29	158	20	10.6		PB-214
										PB-212
2	87.20	491	848	1.39	193.60	182	31	23.2	1.32E+00	NP-237
										PB-214
										PB-212
2	89.85	349	900	1.46	199.46	182	31	35.0		
2	92.75*	492	856	1.54	205.90	182	31	26.1		TH-234
0	186.07*	381	857	1.57	412.76	407	13	34.1		
0	209.50	272	538	1.58	464.69	460	11	35.1		AC-228
4	238.72*	2215	421	1.41	529.44	523	21	5.5	9.01E-01	PB-212
4	241.77	640	561	2.24	536.20	523	21	23.1		PB-214
0	270.41	240	494	1.71	599.69	593	14	41.4		RA-223
										AC-228
0	295.37	780	407	1.43	655.02	648	13	12.8		PB-214
0	300.12	192	256	1.45	665.53	661	10	34.3		PB-212
0	328.05	211	371	1.47	727.44	720	15	42.2		
0	338.36*	450	323	1.45	750.30	744	12	18.7		AC-228
0	351.98*	1317	400	1.51	780.48	772	17	8.9		PB-214
0	462.70	155	202	1.36	1025.89	1020	14	41.9		AC-228
0	510.64*	168	301	2.21	1132.15	1123	17	53.2		TL-208
0	583.38*	663	212	1.51	1293.36	1286	16	12.7		TL-208
0	609.37*	940	184	1.57	1350.98	1343	16	9.2		BI-214
0	661.51	247	153	1.80	1466.53	1457	17	26.2		CS-137
0	727.68	161	139	1.42	1613.18	1604	18	37.8		BI-212
0	768.16	86	203	1.73	1702.91	1695	18	81.0		BI-214
0	795.58	91	73	1.68	1763.67	1757	14	45.6		AC-228
0	860.54	72	56	2.07	1907.64	1903	11	46.3		TL-208
0	911.30*	464	124	1.77	2020.13	2012	19	14.9		AC-228
2	964.91	83	61	2.44	2138.94	2130	42	53.9	2.11E+00	AC-228
2	969.07	276	64	2.03	2148.16	2130	42	17.5		AC-228
0	1120.56*	198	55	1.80	2483.89	2477	14	21.7		BI-214
0	1155.61	45	40	1.45	2561.56	2556	11	62.9		BI-214
0	1238.55	92	54	2.54	2745.37	2735	18	42.9		BI-214
0	1378.40	53	45	1.78	3055.28	3044	20	67.8		BI-214
0	1461.06*	471	41	2.28	3238.46	3228	24	12.0		K-40
0	1620.58	18	13	1.23	3591.94	3587	10	89.4		BI-212
0	1765.30*	158	34	2.25	3912.61	3901	23	25.3		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	89.85	349	900	1.46	199.46	182	31	3.23E-02	35.0	3.55E+00	
0	186.07	381	857	1.57	412.76	407	13	3.53E-02	34.1	2.81E+00	
0	328.05	211	371	1.47	727.44	720	15	1.95E-02	42.2	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.802E+00	5.079E-01	2.636E-01	1.551E-02	14.423
CS-137	1.333E-01	3.621E-02	3.197E-02	2.302E-03	4.169
TL-208	3.218E-01	4.824E-02	3.000E-02	2.388E-03	10.725
BI-212	6.767E-01	2.605E-01	2.120E-01	1.539E-02	3.192
PB-212	1.023E+00	9.480E-02	4.650E-02	3.476E-03	21.988
BI-214	8.691E-01	1.041E-01	5.440E-02	4.145E-03	15.976
PB-214	9.394E-01	1.122E-01	5.673E-02	4.513E-03	16.558
RA-223	3.818E-01	1.615E-01	1.471E-01	1.302E-02	2.595
AC-228	1.077E+00	1.771E-01	1.115E-01	7.840E-03	9.657
TH-234	1.232E+00	3.402E-01	3.425E-01	3.066E-02	3.596
NP-237	5.355E-01	1.378E-01	1.488E-01	1.659E-02	3.598
AM-243	1.720E-01	4.316E-02	2.879E-02	5.536E-03	5.976

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	2.744E-03		1.709E-02	3.046E-02	1.854E-03	0.090
RH-101	-9.267E-03		1.778E-02	2.940E-02	4.538E-03	-0.315
SB-125	-2.736E-02		4.253E-02	7.168E-02	5.925E-03	-0.382
EU-155	4.740E-02		5.138E-02	8.979E-02	8.444E-03	0.528
PO-209	-1.037E+00		3.322E+00	5.751E+00	1.060E+00	-0.180
BI-211	-1.505E-01		4.826E-01	8.052E-01	5.799E-02	-0.187
PA-233	1.419E-02		3.184E-02	5.420E-02	4.423E-03	0.262
PA-234M	1.373E+00		1.944E+00	3.583E+00	2.446E-01	0.383
U-235	6.331E-02		1.076E-01	1.855E-01	1.377E-02	0.341
NP-236	2.023E-02		3.331E-02	4.826E-02	4.605E-03	0.419
NP-239	-8.680E-02		1.178E-01	1.928E-01	2.579E-02	-0.450
AM-241	5.621E-02		3.452E-02	5.278E-02	3.340E-03	1.065
CM-243	-5.924E-03		4.624E-02	7.926E-02	8.540E-03	-0.075
AM-246	2.317E-02		5.880E-02	1.067E-01	1.347E-02	0.217
CF-249	1.317E-02		1.945E-02	3.467E-02	3.453E-03	0.380

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 00:55:04

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792104_GAMMA1_400MLSAN_16977.CNF

---- Sample Information ----

Sample ID	: OH207-7921-04		
Sample Title	: SB-CZ-SS-2158-ST		
Sample Quantity	: 4.90300E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16977		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 3-NOV-2007 21:54:45.
Decay time	: 40 21:54:45.69	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:02.88

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.94	496	687	1.10	149.29	143	16	19.9	1.87E+00	AM-243
										PB-214
										PB-212
3	77.21*	643	599	0.99	153.84	143	16	14.5		PB-214
										PB-212
0	87.23	282	720	1.21	173.90	171	7	33.6		NP-237
										PB-214
										PB-212
3	89.88	143	514	0.83	179.21	177	13	49.9	1.88E+00	
3	93.01*	294	688	1.23	185.47	177	13	32.9		
0	129.60	91	728	0.65	258.74	255	8	105.2		AC-228
0	186.06*	395	691	1.26	371.81	367	10	27.5		
1	208.75	110	311	1.24	417.23	414	9	51.6	4.02E+00	
1	209.52	158	434	1.24	418.77	414	9	47.4		AC-228
2	238.67*	2283	392	1.06	477.14	472	18	5.0	2.93E+00	PB-212
2	240.83	205	422	1.27	481.46	472	18	50.9		
2	241.87	349	310	1.04	483.55	472	18	21.3		PB-214
0	270.10	234	385	1.39	540.07	535	10	34.0		RA-223
										AC-228
0	277.92	111	306	1.37	555.74	552	9	60.0		TL-208
0	295.11	812	375	1.20	590.16	584	12	11.8		PB-214
0	299.94	154	324	1.17	599.82	596	9	45.0		PB-212
0	327.96	213	351	1.56	655.93	650	13	38.8		
0	338.22*	501	320	1.26	676.47	672	10	16.2		AC-228
0	351.81*	1262	287	1.33	703.69	697	12	7.8		PB-214
0	409.45	79	207	1.55	819.10	815	9	69.8		AC-228
0	463.03	159	184	1.13	926.38	921	12	37.7		AC-228
0	510.76*	265	233	2.13	1021.94	1014	15	30.3		TL-208
0	582.95*	692	236	1.48	1166.48	1161	13	12.0		TL-208
0	609.17*	864	193	1.42	1218.97	1213	14	9.8		BI-214
0	661.25	253	175	1.41	1323.23	1316	12	24.5		CS-137
0	727.33	197	150	1.74	1455.52	1449	16	31.6		BI-212
0	755.36	51	90	1.59	1511.65	1506	11	77.1		
0	769.14	83	149	0.84	1539.23	1534	14	66.5		BI-214
0	794.97	93	104	1.09	1590.93	1585	11	47.2		AC-228
0	860.68	84	76	1.84	1722.48	1716	15	50.1		TL-208
0	910.89*	581	54	1.62	1823.01	1817	15	10.1		AC-228
0	933.72	54	52	1.81	1868.72	1863	10	57.6		BI-214
1	964.67	72	90	1.87	1930.66	1924	30	53.3	1.52E+00	AC-228
1	968.50*	284	62	1.73	1938.34	1924	30	16.0		AC-228
0	1120.03	189	67	2.35	2241.67	2235	13	23.1		BI-214
0	1238.05	65	53	1.58	2477.91	2473	11	50.5		BI-214
0	1376.96	66	32	2.09	2755.96	2748	14	43.5		BI-214
0	1460.15*	541	51	2.20	2922.46	2914	17	10.6		K-40
0	1728.94	40	31	2.47	3460.45	3451	18	73.8		BI-214
0	1763.33*	184	13	1.94	3529.27	3520	18	17.8		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	89.88	143	514	0.83	179.21	177	13	1.32E-02	49.9	2.32E+00	
3	93.01	294	688	1.23	185.47	177	13	2.72E-02	32.9	2.43E+00	T
0	186.06	395	691	1.26	371.81	367	10	3.66E-02	27.5	3.03E+00	
1	208.75	110	311	1.24	417.23	414	9	1.02E-02	51.6	2.87E+00	
2	240.83	205	422	1.27	481.46	472	18	1.89E-02	50.9	2.64E+00	
0	327.96	213	351	1.56	655.93	650	13	1.97E-02	38.8	2.11E+00	
0	755.36	51	90	1.59	1511.65	1506	11	4.75E-03	77.1	1.10E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.661E+00	4.624E-01	2.047E-01	1.397E-02	17.883
CS-137	1.256E-01	3.354E-02	3.246E-02	3.488E-03	3.868
TL-208	3.140E-01	4.911E-02	2.691E-02	2.700E-03	11.671
BI-212	7.525E-01	2.485E-01	1.871E-01	1.800E-02	4.021
PB-212	1.013E+00	9.320E-02	4.289E-02	3.310E-03	23.608
BI-214	7.425E-01	1.048E-01	4.691E-02	4.779E-03	15.827
PB-214	8.610E-01	9.558E-02	4.791E-02	3.781E-03	17.970
RA-223	3.564E-01	1.255E-01	1.264E-01	1.164E-02	2.819
AC-228	1.181E+00	1.363E-01	8.131E-02	4.493E-03	14.527
NP-237	5.288E-01	1.936E-01	2.325E-01	3.363E-02	2.274
AM-243	2.223E-01	6.425E-02	5.047E-02	1.059E-02	4.405

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.404E-03		1.359E-02	2.407E-02	1.571E-03	0.141
RH-101	-6.606E-03		1.541E-02	2.506E-02	3.887E-03	-0.264
SB-125	1.658E-02		4.029E-02	7.026E-02	5.762E-03	0.236
EU-155	6.541E-02		5.711E-02	9.924E-02	9.853E-03	0.659
PO-209	1.982E-01		2.555E+00	4.529E+00	8.105E-01	0.044
BI-211	-1.404E-01		4.138E-01	7.082E-01	5.159E-02	-0.198
PA-233	-8.381E-03		2.658E-02	4.550E-02	3.821E-03	-0.184
PA-234M	7.649E-01		1.599E+00	2.895E+00	1.664E-01	0.264
TH-234	1.147E+00	+	4.009E-01	5.687E-01	6.635E-02	2.017
U-235	1.004E-01		1.002E-01	1.709E-01	1.193E-02	0.587
NP-236	2.556E-02		3.214E-02	5.569E-02	6.117E-03	0.459
NP-239	-3.791E-02		1.022E-01	1.640E-01	2.213E-02	-0.231
AM-241	-3.615E-02		9.217E-02	1.579E-01	1.255E-02	-0.229
CM-243	-3.586E-02		5.144E-02	8.499E-02	9.685E-03	-0.422
AM-246	3.781E-02		4.610E-02	8.577E-02	1.056E-02	0.441
CF-249	4.310E-03		1.710E-02	2.970E-02	2.865E-03	0.145

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 00:56:02

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792105_GAMMA2_400MLSAN_16978.CNF

---- Sample Information ----

Sample ID	: OH207-7921-05		
Sample Title	: SB-CZ-SS-2159-ST		
Sample Quantity	: 5.00500E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16978		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 3-NOV-2007 21:55:45.
Decay time	: 40 21:55:45.43	% 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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 Mann Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.73	469	762	1.19	149.05	144	15	21.8	1.63E+00	AM-243
										PB-214
										PB-212
2	77.02	803	638	1.07	153.61	144	15	12.6		PB-214
										PB-212
8	92.71*	270	999	1.66	184.85	170	25	48.2	4.70E+00	
0	129.16	106	927	1.12	257.42	253	10	109.4		AC-228
0	153.71	105	620	1.37	306.31	303	7	81.2		
0	186.04*	525	867	1.45	370.70	365	12	24.4		
0	209.65	265	658	0.96	417.72	413	10	38.4		AC-228
0	238.67*	1925	909	1.17	475.52	470	10	7.5		PB-212
0	241.97	393	512	1.56	482.10	480	7	22.4		PB-214
2	270.02*	123	276	1.32	537.97	535	13	48.6	4.17E+00	RA-223
										AC-228
2	271.04	91	324	1.25	540.00	535	13	72.1		
0	276.99	185	357	3.34	551.87	547	10	40.9		TL-208
0	295.44*	811	432	1.24	588.61	583	11	12.2		PB-214
0	300.13	163	389	1.72	597.97	594	10	47.8		PB-212
0	328.36	188	339	1.12	654.21	648	12	41.7		
0	338.46*	526	375	1.39	674.33	668	13	17.6		AC-228
0	352.17*	1398	438	1.28	701.65	695	13	8.2		PB-214
0	409.89	109	254	1.43	816.68	811	11	60.1		AC-228
0	463.16	136	188	1.05	922.86	918	10	41.5		AC-228
0	511.16*	254	199	1.41	1018.54	1012	14	29.2		TL-208
0	583.44*	638	240	1.44	1162.65	1157	14	13.1		TL-208
0	609.44*	1009	227	1.38	1214.50	1208	15	9.2		BI-214
0	661.79	413	138	1.56	1318.90	1312	12	14.8		CS-137
0	666.14	70	87	1.75	1327.58	1324	11	56.9		
0	727.40	155	105	1.58	1449.79	1444	11	29.6		BI-212
0	755.09	48	90	1.45	1505.03	1498	11	82.7		
0	770.54	186	136	4.54	1535.85	1527	21	35.1		
0	794.85	117	98	1.83	1584.37	1576	18	44.0		AC-228
0	861.93*	65	130	2.11	1718.23	1706	20	90.6		TL-208
0	911.15*	465	90	1.73	1816.47	1810	14	12.8		AC-228
0	934.59	52	65	1.90	1863.25	1858	13	70.4		BI-214
2	964.77	113	73	1.96	1923.51	1917	21	34.6	3.37E+00	AC-228
2	968.95*	296	51	1.95	1931.85	1917	21	15.6		AC-228
0	1120.16*	237	60	1.41	2233.80	2227	15	19.4		BI-214
0	1237.46	102	59	1.68	2468.14	2461	14	37.8		BI-214
0	1459.80*	522	53	1.95	2912.55	2903	21	11.4		K-40
0	1727.54	46	7	1.29	3448.12	3441	14	38.3		BI-214
0	1762.51*	173	6	2.12	3518.10	3512	11	16.7		BI-214
0	1845.92	40	14	1.12	3685.06	3678	15	52.4		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
8	92.71	270	999	1.66	184.85	170	25	2.50E-02	48.2	2.70E+00	T
0	153.71	105	620	1.37	306.31	303	7	9.73E-03	81.2	3.38E+00	
0	186.04	525	867	1.45	370.70	365	12	4.86E-02	24.4	3.21E+00	
2	271.04	91	324	1.25	540.00	535	13	8.39E-03	72.1	2.56E+00	
0	328.36	188	339	1.12	654.21	648	12	1.74E-02	41.7	2.20E+00	
0	666.14	70	87	1.75	1327.58	1324	11	6.50E-03	56.9	1.21E+00	
0	755.09	48	90	1.45	1505.03	1498	11	4.41E-03	82.7	1.10E+00	
0	770.54	186	136	4.54	1535.85	1527	21	1.72E-02	35.1	1.08E+00	
0	1845.92	40	14	1.12	3685.06	3678	15	3.71E-03	52.4	5.62E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.625E+00	4.738E-01	2.012E-01	1.295E-02	18.019
CS-137	2.000E-01	3.727E-02	2.418E-02	2.751E-03	8.268
TL-208	2.797E-01	4.691E-02	2.408E-02	2.507E-03	11.615
BI-212	5.804E-01	1.834E-01	1.875E-01	2.050E-02	3.096
PB-212	7.934E-01	8.495E-02	4.637E-02	3.543E-03	17.110
BI-214	8.411E-01	1.181E-01	4.863E-02	5.178E-03	17.297
PB-214	8.959E-01	1.008E-01	5.020E-02	3.849E-03	17.847
RA-223	1.742E-01	8.601E-02	1.296E-01	1.153E-02	1.343
AC-228	9.482E-01	1.470E-01	8.307E-02	7.219E-03	11.414
AM-243	1.765E-01	5.209E-02	4.800E-02	9.568E-03	3.676

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	5.395E-03		1.348E-02	2.210E-02	1.285E-03	0.244
RH-101	-1.015E-02		1.556E-02	2.449E-02	3.823E-03	-0.415
SB-125	-2.263E-02		4.180E-02	6.873E-02	5.635E-03	-0.329
EU-155	4.526E-02		5.496E-02	9.359E-02	8.763E-03	0.484
PO-209	7.517E-01		2.658E+00	4.739E+00	9.085E-01	0.159
BI-211	1.322E-01		4.414E-01	7.798E-01	7.633E-02	0.169
PA-233	9.235E-03		2.616E-02	4.552E-02	3.666E-03	0.203
PA-234M	2.022E+00		1.664E+00	3.155E+00	2.463E-01	0.641
TH-234	9.258E-01	+	4.554E-01	5.407E-01	5.408E-02	1.712
U-235	5.083E-02		1.015E-01	1.680E-01	1.226E-02	0.303
NP-236	2.057E-02		3.502E-02	5.348E-02	5.316E-03	0.385
NP-237	1.500E-01		1.557E-01	2.378E-01	2.989E-02	0.631
NP-239	1.770E-02		9.799E-02	1.704E-01	2.300E-02	0.104
AM-241	-4.469E-02		8.251E-02	1.385E-01	9.088E-03	-0.323
CM-243	-2.092E-02		4.963E-02	8.176E-02	8.840E-03	-0.256
AM-246	3.512E-02		4.352E-02	8.132E-02	1.040E-02	0.432
CF-249	1.013E-02		1.694E-02	2.954E-02	2.830E-03	0.343

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 00:56:50

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792106_GAMMA3_400MLSAN_16979.CNF

---- Sample Information ----

Sample ID : OH207-7921-06
Sample Title : SB-CZ-SS-2160-ST
Sample Quantity : 4.79500E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 16979

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 3-NOV-2007 21:56:31.
Decay time : 40 21:56:31.07 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:01.21

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.32*	155	914	1.43	140.66	136	10	78.0		TH-234
2	74.92*	884	1065	1.59	166.38	159	19	17.1	7.53E+00	AM-243
										PB-214
										PB-212
2	77.18*	1538	976	1.54	171.39	159	19	9.6		PB-214
										PB-212
0	83.26*	235	1274	1.35	184.86	178	13	64.2		
5	87.31	562	666	1.43	193.85	190	23	17.1	3.22E+00	NP-237
										PB-214
										PB-212
5	89.97	332	1274	2.16	199.73	190	23	50.2		
5	92.84*	464	870	1.55	206.11	190	23	27.9		TH-234
0	128.90	146	864	1.41	286.02	282	10	76.8		AC-228
0	185.97*	537	843	1.64	412.52	406	14	25.0		
0	209.23	230	565	1.40	464.08	460	10	40.8		AC-228
2	238.76*	2327	448	1.46	529.53	520	23	5.5	2.00E+00	PB-212
2	241.63	527	561	1.79	535.91	520	23	23.6		PB-214
0	270.18	186	366	1.27	599.17	594	10	41.1		RA-223
										AC-228
1	295.35	759	312	1.57	654.97	647	24	11.2	2.24E+00	PB-214
1	300.43	198	267	1.73	666.23	647	24	35.0		PB-212
0	328.28	115	399	1.75	727.97	720	14	76.0		
0	338.35*	426	317	1.69	750.29	746	11	18.8		AC-228
0	352.04*	1231	343	1.53	780.63	772	14	8.6		PB-214
0	463.90	124	294	2.17	1028.56	1018	17	66.3		AC-228
0	511.04*	202	236	1.97	1133.03	1126	16	40.3		TL-208
0	583.27*	680	213	1.39	1293.11	1286	15	12.3		TL-208
0	609.37*	907	199	1.69	1350.96	1344	17	9.8		BI-214
0	661.66	297	140	1.71	1466.85	1458	15	20.8		CS-137
0	727.29	198	167	1.83	1612.31	1603	19	34.2		BI-212
0	768.08	102	91	1.13	1702.72	1696	13	43.2		BI-214
0	795.01	77	88	1.48	1762.41	1755	13	54.9		AC-228
0	860.59	105	105	1.04	1907.74	1900	15	47.0		TL-208
0	911.45*	475	60	1.77	2020.46	2013	18	12.2		AC-228
2	964.66	100	76	2.44	2138.39	2131	23	41.3	1.18E+00	AC-228
2	969.18	277	57	1.63	2148.41	2131	23	16.0		AC-228
0	1120.35*	232	62	1.25	2483.43	2472	19	21.1		BI-214
0	1461.10*	661	15	2.57	3238.54	3230	21	8.5		K-40
0	1588.43*	27	19	1.42	3520.70	3515	11	75.7		AC-228
0	1764.75*	150	22	2.11	3911.39	3901	22	23.3		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	83.26	235	1274	1.35	184.86	178	13	2.18E-02	64.2	3.54E+00	
5	89.97	332	1274	2.16	199.73	190	23	3.08E-02	50.2	3.55E+00	
0	185.97	537	843	1.64	412.52	406	14	4.97E-02	25.0	2.81E+00	
0	328.28	115	399	1.75	727.97	720	14	1.06E-02	76.0	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.802E+00	6.003E-01	2.423E-01	1.425E-02	23.947
CS-137	1.741E-01	3.833E-02	3.709E-02	2.670E-03	4.694
TL-208	3.591E-01	5.250E-02	3.051E-02	2.428E-03	11.769
BI-212	9.056E-01	3.170E-01	2.500E-01	1.814E-02	3.623
PB-212	1.167E+00	1.083E-01	4.979E-02	3.722E-03	23.444
BI-214	9.108E-01	1.132E-01	6.250E-02	4.762E-03	14.571
PB-214	9.542E-01	1.116E-01	6.239E-02	4.963E-03	15.295
RA-223	3.222E-01	1.354E-01	1.717E-01	1.520E-02	1.877
AC-228	1.197E+00	1.683E-01	1.141E-01	8.026E-03	10.485
TH-234	1.261E+00	3.695E-01	3.689E-01	3.303E-02	3.419
NP-237	6.666E-01	1.361E-01	1.640E-01	1.828E-02	4.064
AM-243	1.935E-01	4.986E-02	3.074E-02	5.912E-03	6.296

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	8.235E-03		1.916E-02	3.205E-02	1.699E-03	0.257
RH-101	3.028E-03		1.935E-02	3.269E-02	5.046E-03	0.093
SB-125	-1.340E-02		4.941E-02	8.472E-02	7.004E-03	-0.158
EU-155	4.120E-02		5.526E-02	9.636E-02	9.062E-03	0.428
PO-209	5.374E-01		3.801E+00	6.772E+00	1.248E+00	0.079
BI-211	3.059E-01		5.483E-01	9.679E-01	6.970E-02	0.316
PA-233	-8.255E-03		3.477E-02	5.760E-02	4.700E-03	-0.143
PA-234M	6.151E-01		2.129E+00	3.815E+00	2.605E-01	0.161
U-235	4.246E-02		1.176E-01	2.018E-01	1.498E-02	0.210
NP-236	4.530E-02		3.664E-02	5.398E-02	5.151E-03	0.839
NP-239	8.692E-03		1.259E-01	2.124E-01	2.841E-02	0.041
AM-241	5.027E-02		3.812E-02	5.767E-02	3.650E-03	0.872
CM-243	9.471E-03		5.005E-02	8.641E-02	9.312E-03	0.110
AM-246	4.047E-02		6.311E-02	1.165E-01	1.471E-02	0.347
CF-249	6.132E-04		2.130E-02	3.709E-02	3.694E-03	0.017

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 03:57:26

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792107_GAMMA1_400MLSAN_16980.CNF

---- Sample Information ----

Sample ID	: OH207-7921-07		
Sample Title	: SB-CZ-SS-2161-ST		
Sample Quantity	: 4.11800E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16980		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 00:56:58.
Decay time	: 41 00:56:58.38	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:02.69

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.92	471	531	1.07	149.24	143	16	18.0	5.04E-01	AM-243
										PB-214
										PB-212
2	77.25*	651	422	0.90	153.91	143	16	12.6		PB-214
										PB-212
6	87.36	423	813	1.69	174.16	164	26	27.1	2.49E+00	NP-237
										PB-214
										PB-212
6	90.11	213	568	1.13	179.66	164	26	39.9		
6	92.96*	357	649	1.39	185.38	164	26	28.0		
0	129.07	202	535	1.02	257.67	254	8	42.1		AC-228
0	185.85*	361	787	1.24	371.37	366	12	33.3		
0	209.36	271	579	1.19	418.46	413	11	36.5		AC-228
3	238.65*	2027	340	1.09	477.09	472	17	5.4	1.56E+00	PB-212
3	241.04	308	326	1.23	481.89	472	17	29.2		
3	242.14	220	276	1.01	484.10	472	17	31.6		PB-214
0	270.34	191	365	1.33	540.56	536	10	40.2		RA-223
										AC-228
0	277.86	75	276	0.98	555.62	551	8	80.2		TL-208
0	295.28	630	319	1.10	590.50	586	10	13.3		PB-214
0	300.69	181	384	1.42	601.34	596	13	47.1		PB-212
0	327.84	113	355	1.11	655.68	651	12	69.2		
0	338.31*	349	380	1.10	676.66	672	10	23.7		AC-228
0	351.75*	1151	359	1.32	703.57	697	15	9.3		PB-214
0	462.93	127	146	1.26	926.18	921	9	38.7		AC-228
0	510.83*	217	286	1.53	1022.08	1016	15	39.5		TL-208
0	583.01*	658	210	1.54	1166.59	1161	13	12.1		TL-208
0	609.16*	862	120	1.52	1218.95	1214	12	8.6		BI-214
0	661.44	193	115	1.71	1323.61	1318	10	25.3		CS-137
0	727.04	149	104	1.24	1454.95	1450	10	30.4		BI-212
0	770.97	193	120	9.14	1542.89	1532	26	35.3		
0	795.43	88	126	1.45	1591.86	1584	16	62.2		AC-228
0	860.35	86	95	1.34	1721.83	1716	14	52.6		TL-208
0	910.83*	507	84	1.82	1822.89	1815	16	12.1		AC-228
0	934.72*	75	52	2.00	1870.71	1863	15	49.4		BI-214
2	964.40	100	22	2.06	1930.13	1925	20	29.6	1.73E+00	AC-228
2	968.57*	312	33	1.90	1938.48	1925	20	13.5		AC-228
0	1120.00	186	56	1.77	2241.61	2235	13	22.4		BI-214
0	1186.59	25	39	0.61	2374.90	2366	13	109.9		
0	1237.80	56	80	2.34	2477.41	2472	13	70.1		BI-214
0	1407.20	46	18	2.99	2816.49	2810	14	48.4		BI-214
0	1460.04*	604	20	2.04	2922.26	2912	20	9.0		K-40
0	1589.20	82	20	1.09	3180.75	3170	22	36.2		AC-228
0	1730.01	33	32	3.60	3462.57	3452	16	83.0		BI-214
0	1763.58*	139	24	2.52	3529.76	3520	19	24.3		BI-214
0	1846.54	26	3	2.49	3695.79	3689	12	47.8		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	90.11	213	568	1.13	179.66	164	26	1.98E-02	39.9	2.33E+00	
6	92.96	357	649	1.39	185.38	164	26	3.31E-02	28.0	2.43E+00	T
0	185.85	361	787	1.24	371.37	366	12	3.34E-02	33.3	3.03E+00	
3	241.04	308	326	1.23	481.89	472	17	2.85E-02	29.2	2.64E+00	
0	327.84	113	355	1.11	655.68	651	12	1.04E-02	69.2	2.11E+00	
0	770.97	193	120	9.14	1542.89	1532	26	1.78E-02	35.3	1.09E+00	
0	1186.59	25	39	0.61	2374.90	2366	13	2.33E-03	****	8.17E-01	
0	1846.54	26	3	2.49	3695.79	3689	12	2.39E-03	47.8	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.863E+00	5.503E-01	2.468E-01	1.684E-02	19.705
CS-137	1.138E-01	3.130E-02	3.260E-02	3.503E-03	3.492
TL-208	3.555E-01	5.581E-02	2.919E-02	2.929E-03	12.179
BI-212	6.782E-01	2.163E-01	2.251E-01	2.165E-02	3.013
PB-212	1.070E+00	1.010E-01	4.755E-02	3.669E-03	22.508
BI-214	8.815E-01	1.175E-01	5.293E-02	5.392E-03	16.654
PB-214	9.345E-01	1.140E-01	5.423E-02	4.280E-03	17.231
RA-223	3.456E-01	1.426E-01	1.420E-01	1.307E-02	2.433
AC-228	1.227E+00	1.637E-01	1.056E-01	5.833E-03	11.624
NP-237	9.446E-01	2.905E-01	2.354E-01	3.404E-02	4.013
AM-243	2.513E-01	6.938E-02	5.806E-02	1.218E-02	4.328

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.013E-02		1.532E-02	2.573E-02	1.679E-03	0.394
RH-101	-9.052E-03		1.784E-02	2.894E-02	4.488E-03	-0.313
SB-125	3.203E-03		4.535E-02	7.802E-02	6.398E-03	0.041
EU-155	3.343E-02		6.631E-02	1.138E-01	1.130E-02	0.294
PO-209	-1.873E+00		3.037E+00	5.044E+00	9.028E-01	-0.371
BI-211	-4.730E-01		4.607E-01	7.463E-01	5.437E-02	-0.634
PA-233	-1.488E-02		3.054E-02	5.190E-02	4.358E-03	-0.287
PA-234M	1.045E+00		1.815E+00	3.327E+00	1.912E-01	0.314
TH-234	1.660E+00	+	5.043E-01	6.730E-01	7.852E-02	2.467
U-235	1.685E-01		1.132E-01	1.956E-01	1.366E-02	0.861
NP-236	8.107E-03		3.759E-02	6.428E-02	7.062E-03	0.126
NP-239	-3.758E-02		1.161E-01	1.870E-01	2.523E-02	-0.201
AM-241	-3.217E-02		1.034E-01	1.778E-01	1.413E-02	-0.181
CM-243	-1.577E-02		6.043E-02	1.015E-01	1.157E-02	-0.155
AM-246	1.534E-02		5.592E-02	9.969E-02	1.227E-02	0.154
CF-249	9.515E-03		1.896E-02	3.343E-02	3.225E-03	0.285

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 03:58:56

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792108_GAMMA2_400MLSAN_16981.CNF

---- Sample Information ----

Sample ID	: OH207-7921-08
Sample Title	: SB-CZ-SS-2162-ST
Sample Quantity	: 4.36000E+02 GDRY
Sample Type	: SOIL
Sample Geometry	: 400 ml sand
Sample Seq No.	: 16981

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 00:58:39.
Decay time	: 41 00:58:39.05	% 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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 Mead Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.77	442	660	1.08	149.13	145	21	20.4	1.53E+00	AM-243
										PB-214
										PB-212
1	77.12	776	601	1.06	153.80	145	21	12.4		PB-214
										PB-212
0	84.05*	78	571	0.96	167.59	165	6	99.9		
0	87.19*	290	583	1.30	173.86	171	6	29.1		NP-237
										PB-214
										PB-212
5	89.90*	222	367	1.06	179.24	177	14	27.5	3.86E-01	
5	92.96*	387	755	1.53	185.35	177	14	28.6		
0	128.97	129	662	1.31	257.04	253	8	71.2		AC-228
0	185.79*	366	804	1.13	370.20	365	12	33.3		
0	209.38	170	497	1.03	417.19	413	8	48.2		AC-228
3	238.75*	1983	367	1.15	475.69	468	19	5.6	1.34E+00	PB-212
3	241.27	258	323	1.22	480.70	468	19	32.9		
3	242.31	269	316	1.21	482.78	468	19	28.4		PB-214
2	270.05*	113	275	1.20	538.03	534	11	54.1	2.13E+00	RA-223
										AC-228
2	270.98*	108	347	1.52	539.89	534	11	68.0		
0	295.39*	619	320	1.20	588.52	585	9	13.2		PB-214
0	300.59	135	353	1.42	598.88	594	12	59.4		PB-212
0	338.64*	403	341	1.25	674.69	669	13	21.6		AC-228
0	352.15*	1134	306	1.29	701.61	696	12	8.7		PB-214
0	409.80	42	168	0.66	816.51	813	8	112.5		AC-228
0	462.78	119	165	1.53	922.10	917	10	44.5		AC-228
0	510.87*	208	291	1.82	1017.97	1010	18	43.3		TL-208
0	583.30*	633	174	1.34	1162.37	1154	15	12.1		TL-208
0	609.50*	821	157	1.37	1214.61	1207	13	9.5		BI-214
0	661.64	389	111	1.63	1318.61	1313	11	14.6		CS-137
0	727.76	128	168	1.58	1450.50	1444	15	48.1		BI-212
0	769.05	103	138	0.84	1532.88	1525	17	56.1		BI-214
0	795.08	78	82	2.31	1584.83	1579	13	53.1		AC-228
0	837.56	102	104	6.35	1669.60	1661	21	52.7		
0	860.72*	104	80	1.86	1715.80	1709	17	43.7		TL-208
0	911.09*	426	104	1.63	1816.34	1810	15	14.4		AC-228
1	964.53	80	62	1.93	1923.04	1914	24	47.2	1.52E+00	AC-228
1	968.86*	273	62	1.89	1931.67	1914	24	16.7		AC-228
0	1120.00*	183	56	2.00	2233.49	2228	13	22.5		BI-214
0	1237.56	98	53	2.52	2468.35	2462	14	37.5		BI-214
0	1377.74	71	40	2.61	2748.51	2739	19	50.1		BI-214
0	1407.19	61	19	2.31	2807.37	2800	14	40.8		BI-214
0	1459.72*	492	43	2.06	2912.40	2905	18	11.1		K-40
0	1728.45	23	19	0.72	3449.95	3443	11	85.6		BI-214
0	1762.72*	136	13	1.55	3518.52	3510	17	21.7		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	84.05	78	571	0.96	167.59	165	6	7.26E-03	99.9	2.38E+00	
5	89.90	222	367	1.06	179.24	177	14	2.06E-02	27.5	2.61E+00	
5	92.96	387	755	1.53	185.35	177	14	3.58E-02	28.6	2.71E+00	T
0	185.79	366	804	1.13	370.20	365	12	3.39E-02	33.3	3.21E+00	
3	241.27	258	323	1.22	480.70	468	19	2.38E-02	32.9	2.78E+00	
2	270.98	108	347	1.52	539.89	534	11	1.00E-02	68.0	2.56E+00	
0	837.56	102	104	6.35	1669.60	1661	21	9.49E-03	52.7	1.01E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.928E+00	5.040E-01	2.243E-01	1.444E-02	17.512
CS-137	2.162E-01	4.008E-02	2.994E-02	3.406E-03	7.221
TL-208	3.189E-01	5.098E-02	2.745E-02	2.859E-03	11.615
BI-212	5.508E-01	2.715E-01	2.074E-01	2.268E-02	2.655
PB-212	9.383E-01	8.869E-02	4.454E-02	3.404E-03	21.067
BI-214	7.862E-01	1.120E-01	5.137E-02	5.470E-03	15.304
PB-214	8.345E-01	9.661E-02	5.406E-02	4.146E-03	15.436
RA-223	1.849E-01	1.013E-01	1.338E-01	1.190E-02	1.382
AC-228	9.964E-01	1.677E-01	9.468E-02	8.227E-03	10.525
NP-237	5.425E-01	1.719E-01	2.187E-01	2.748E-02	2.480
AM-243	1.911E-01	5.457E-02	5.320E-02	1.060E-02	3.593

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.002E-02		1.641E-02	2.643E-02	1.537E-03	-0.379
RH-101	3.108E-04		1.665E-02	2.698E-02	4.212E-03	0.012
SB-125	9.729E-03		4.339E-02	7.447E-02	6.105E-03	0.131
EU-155	6.485E-02		5.988E-02	1.028E-01	9.624E-03	0.631
PO-209	1.398E+00		3.102E+00	5.582E+00	1.070E+00	0.250
BI-211	4.248E-01		4.503E-01	7.569E-01	7.410E-02	0.561
PA-233	-1.512E-02		2.880E-02	4.835E-02	3.895E-03	-0.313
PA-234M	2.025E+00		1.842E+00	3.487E+00	2.722E-01	0.581
TH-234	1.522E+00	+	4.616E-01	5.906E-01	5.907E-02	2.577
U-235	-9.292E-02		1.099E-01	1.745E-01	1.274E-02	-0.532
NP-236	5.607E-02		3.582E-02	5.962E-02	5.927E-03	0.940
NP-239	1.787E-02		1.005E-01	1.754E-01	2.368E-02	0.102
AM-241	-8.071E-02		8.880E-02	1.473E-01	9.665E-03	-0.548
CM-243	3.464E-03		5.304E-02	8.892E-02	9.613E-03	0.039
AM-246	5.427E-02		5.045E-02	9.596E-02	1.227E-02	0.566
CF-249	1.187E-02		1.879E-02	3.288E-02	3.150E-03	0.361

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 04:00:03

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792109_GAMMA3_400MLSAN_16982.CNF

---- Sample Information ----

Sample ID	: OH207-7921-09		
Sample Title	: SB-CZ-SS-2163-ST		
Sample Quantity	: 4.38800E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16982		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 00:59:47.
Decay time	: 41 00:59:47.92	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.09

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.60*	175	525	1.15	103.60	99	11	55.0		
0	63.23*	137	980	1.13	140.47	136	11	93.6		TH-234
3	74.90*	731	1061	1.45	166.33	160	17	19.5	7.49E-01	AM-243
										PB-214
										PB-212
3	77.17*	1224	886	1.28	171.36	160	17	11.1		PB-214
										PB-212
0	87.30	320	936	1.22	193.83	189	9	36.2		NP-237
										PB-214
										PB-212
0	93.18*	322	1183	1.32	206.84	201	12	46.7		TH-234
0	129.43	132	764	1.13	287.21	281	11	82.6		AC-228
0	185.88*	300	615	1.47	412.33	407	11	35.2		
0	209.42	192	517	1.25	464.50	460	10	46.6		AC-228
3	238.70*	1906	397	1.58	529.41	522	20	6.3	1.86E+00	PB-212
3	241.76	447	392	1.68	536.19	522	20	21.7		PB-214
0	270.60	147	341	1.64	600.11	594	11	51.5		RA-223
										AC-228
0	295.35	714	378	1.56	654.97	645	16	14.2		PB-214
0	300.40	191	243	1.35	666.16	661	12	35.8		PB-212
0	338.61*	465	361	1.54	750.85	744	17	21.1		AC-228
0	352.06*	1131	324	1.54	780.66	771	15	9.1		PB-214
0	462.84	120	183	1.18	1026.21	1020	13	49.7		AC-228
0	510.96*	203	245	2.00	1132.86	1126	18	42.0		TL-208
0	583.33*	568	141	1.69	1293.25	1287	13	12.2		TL-208
0	609.33*	860	186	1.59	1350.87	1341	18	10.1		BI-214
0	661.92	442	221	1.88	1467.43	1460	19	18.8		CS-137
0	727.59	112	87	1.59	1612.97	1606	11	37.0		BI-212
0	794.98	91	63	1.60	1762.34	1757	12	40.5		AC-228
0	860.71	89	118	1.85	1908.02	1899	21	63.9		TL-208
0	911.35*	379	95	1.91	2020.25	2010	19	16.2		AC-228
0	934.16	64	66	1.01	2070.80	2060	19	66.3		BI-214
0	969.22	212	67	1.51	2148.49	2143	11	20.4		AC-228
0	1001.25*	33	44	1.39	2219.49	2211	16	100.0		PA-234M
0	1120.93*	162	81	2.01	2484.70	2475	17	30.2		BI-214
0	1238.29	49	77	1.75	2744.78	2737	14	81.6		BI-214
0	1460.99*	454	59	2.04	3238.29	3229	18	12.5		K-40
0	1764.78*	128	5	2.29	3911.45	3901	18	20.0		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	46.60	175	525	1.15	103.60	99	11	1.62E-02	55.0	2.77E+00	
0	185.88	300	615	1.47	412.33	407	11	2.77E-02	35.2	2.82E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.357E+00	6.027E-01	2.978E-01	1.752E-02	14.629
CS-137	2.828E-01	5.688E-02	3.385E-02	2.437E-03	8.355
TL-208	3.275E-01	4.778E-02	3.254E-02	2.590E-03	10.065
BI-212	5.607E-01	2.116E-01	2.564E-01	1.861E-02	2.187
PB-212	1.045E+00	1.019E-01	5.353E-02	4.001E-03	19.518
BI-214	9.439E-01	1.198E-01	6.198E-02	4.723E-03	15.229
PB-214	9.583E-01	1.162E-01	6.355E-02	5.055E-03	15.080
RA-223	2.772E-01	1.448E-01	1.616E-01	1.431E-02	1.715
AC-228	1.042E+00	1.843E-01	1.207E-01	8.487E-03	8.635
PA-234M	2.992E+00	2.997E+00	3.461E+00	2.363E-01	0.865
TH-234	9.560E-01	4.548E-01	4.101E-01	3.671E-02	2.331
NP-237	4.149E-01	1.572E-01	1.965E-01	2.190E-02	2.111
AM-243	1.750E-01	4.800E-02	3.367E-02	6.475E-03	5.199

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.016E-02		1.834E-02	3.082E-02	1.634E-03	0.330
RH-101	-1.914E-02		1.986E-02	3.214E-02	4.960E-03	-0.596
SB-125	2.235E-02		5.088E-02	9.020E-02	7.457E-03	0.248
EU-155	2.806E-02		5.661E-02	9.849E-02	9.262E-03	0.285
PO-209	2.096E+00		3.707E+00	6.819E+00	1.256E+00	0.307
BI-211	-7.661E-01		5.657E-01	8.622E-01	6.209E-02	-0.889
PA-233	1.286E-02		3.711E-02	6.299E-02	5.141E-03	0.204
U-235	-4.566E-02		1.185E-01	2.001E-01	1.485E-02	-0.228
NP-236	2.709E-02		3.698E-02	5.395E-02	5.149E-03	0.502
NP-239	7.419E-03		1.289E-01	2.177E-01	2.913E-02	0.034
AM-241	4.765E-02		4.031E-02	6.085E-02	3.851E-03	0.783
CM-243	-2.620E-02		5.106E-02	8.668E-02	9.340E-03	-0.302
AM-246	9.340E-02		6.711E-02	1.297E-01	1.637E-02	0.720
CF-249	1.160E-02		2.163E-02	3.852E-02	3.837E-03	0.301

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 13:39:25

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792110_GAMMA1_400MLSAN_16983.CNF

---- Sample Information ----

Sample ID	: OH207-7921-10		
Sample Title	: SB-CZ-SS-2164-ST		
Sample Quantity	: 4.91600E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16983		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 10:39:08.
Decay time	: 41 10:39:08.18	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:02.83

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.94	403	633	1.12	149.29	143	14	23.2	1.13E+00	AM-243
										PB-214
										PB-212
2	77.21*	621	461	0.91	153.84	143	14	13.3		PB-214
										PB-212
2	87.36	271	634	1.15	174.17	171	11	33.1	2.15E+00	NP-237
										PB-214
										PB-212
2	89.88	167	541	1.05	179.20	171	11	46.6		
0	93.01*	354	714	1.80	185.48	182	9	30.3		
0	128.89	150	541	0.78	257.31	254	7	54.1		AC-228
0	185.92*	405	770	1.29	371.51	365	11	28.9		
0	208.96	223	610	1.38	417.65	413	10	43.6		AC-228
3	238.63*	2274	423	1.08	477.07	472	17	5.2	2.28E+00	PB-212
3	240.93	176	366	1.10	481.66	472	17	54.1		
3	241.92	361	355	1.16	483.65	472	17	22.0		PB-214
1	269.95	154	298	1.32	539.77	534	13	43.4	2.89E+00	RA-223
										AC-228
1	271.18	67	293	1.32	542.24	534	13	99.1		
0	295.25	751	411	1.24	590.44	586	11	12.7		PB-214
0	300.19	134	240	1.25	600.33	597	7	42.3		PB-212
0	328.05	213	413	1.14	656.12	649	14	42.7		
0	338.35*	471	403	1.22	676.74	670	14	20.4		AC-228
0	351.82*	1321	302	1.19	703.71	699	11	7.5		PB-214
0	409.78	84	220	0.86	819.75	815	10	69.8		AC-228
0	462.81	179	183	1.07	925.93	921	11	32.8		AC-228
0	510.51*	296	270	1.41	1021.44	1014	16	29.3		TL-208
0	583.01*	617	185	1.34	1166.58	1160	11	11.8		TL-208
0	609.16*	1005	179	1.50	1218.95	1212	13	8.4		BI-214
0	661.37	283	154	1.41	1323.47	1318	11	20.7		CS-137
0	727.17	183	90	1.64	1455.21	1450	13	26.3		BI-212
0	768.23	92	82	1.27	1537.40	1533	9	41.1		BI-214
0	786.05	54	98	1.27	1573.08	1567	10	75.8		BI-212
0	795.10	93	109	1.50	1591.21	1585	14	51.8		AC-228
0	836.00	42	65	1.54	1673.08	1668	9	75.8		
0	860.10	100	55	1.70	1721.33	1716	11	34.9		TL-208
0	910.92*	492	108	1.70	1823.06	1814	19	13.7		AC-228
0	934.15	43	76	0.94	1869.57	1865	12	88.7		BI-214
0	964.17	85	49	1.01	1929.67	1924	11	38.8		AC-228
0	968.83*	287	94	1.71	1938.99	1934	14	18.9		AC-228
0	1120.05	209	84	1.68	2241.71	2233	14	22.7		BI-214
0	1238.05	81	35	1.94	2477.92	2473	11	36.3		BI-214
0	1377.98	42	54	1.64	2757.99	2752	15	81.5		BI-214
0	1401.49*	33	34	1.40	2805.05	2800	11	79.9		BI-214
0	1460.26*	621	72	2.27	2922.70	2913	22	10.7		K-40
0	1630.22	25	12	1.56	3262.87	3257	10	67.0		
0	1763.82*	192	14	2.29	3530.24	3522	19	17.5		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	89.88	167	541	1.05	179.20	171	11	1.55E-02	46.6	2.32E+00	
0	93.01	354	714	1.80	185.48	182	9	3.28E-02	30.3	2.43E+00	T
0	185.92	405	770	1.29	371.51	365	11	3.75E-02	28.9	3.03E+00	
3	240.93	176	366	1.10	481.66	472	17	1.63E-02	54.1	2.64E+00	
1	271.18	67	293	1.32	542.24	534	13	6.24E-03	99.1	2.43E+00	
0	328.05	213	413	1.14	656.12	649	14	1.97E-02	42.7	2.11E+00	
0	836.00	42	65	1.54	1673.08	1668	9	3.89E-03	75.8	1.03E+00	
0	1630.22	25	12	1.56	3262.87	3257	10	2.28E-03	67.0	6.51E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.188E+00	5.319E-01	1.908E-01	1.302E-02	21.953
CS-137	1.399E-01	3.267E-02	2.981E-02	3.204E-03	4.691
TL-208	2.791E-01	4.324E-02	2.647E-02	2.657E-03	10.542
BI-212	6.972E-01	1.951E-01	1.866E-01	1.795E-02	3.736
PB-212	1.006E+00	9.350E-02	4.301E-02	3.319E-03	23.381
BI-214	8.608E-01	1.139E-01	4.854E-02	4.944E-03	17.733
PB-214	8.986E-01	9.805E-02	4.943E-02	3.900E-03	18.179
RA-223	2.334E-01	1.036E-01	1.292E-01	1.189E-02	1.807
AC-228	9.987E-01	1.477E-01	8.788E-02	4.856E-03	11.365
NP-237	5.079E-01	1.836E-01	2.293E-01	3.316E-02	2.215
AM-243	1.800E-01	5.625E-02	4.867E-02	1.021E-02	3.698

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-8.083E-03		1.408E-02	2.096E-02	1.367E-03	-0.386
RH-101	-1.291E-03		1.505E-02	2.485E-02	3.853E-03	-0.052
SB-125	1.905E-02		3.968E-02	6.947E-02	5.697E-03	0.274
EU-155	6.906E-02		5.649E-02	9.835E-02	9.765E-03	0.702
PO-209	2.697E+00		2.900E+00	5.331E+00	9.541E-01	0.506
BI-211	1.563E-01		4.295E-01	6.812E-01	4.963E-02	0.229
PA-233	6.968E-03		2.627E-02	4.607E-02	3.869E-03	0.151
PA-234M	1.504E+00		1.529E+00	2.883E+00	1.657E-01	0.522
TH-234	1.377E+00	+	4.466E-01	5.549E-01	6.474E-02	2.481
U-235	1.450E-01		9.844E-02	1.697E-01	1.185E-02	0.854
NP-236	6.545E-02		3.398E-02	5.745E-02	6.311E-03	1.139
NP-239	-5.796E-02		1.035E-01	1.647E-01	2.222E-02	-0.352
AM-241	4.854E-02		8.796E-02	1.552E-01	1.234E-02	0.313
CM-243	1.233E-02		5.123E-02	8.737E-02	9.957E-03	0.141
AM-246	-8.322E-03		5.055E-02	8.639E-02	1.063E-02	-0.096
CF-249	1.034E-02		1.761E-02	3.095E-02	2.985E-03	0.334

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 13:40:30

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792111_GAMMA2_400MLSAN_16984.CNF

---- Sample Information ----

Sample ID	: OH207-7921-11		
Sample Title	: SB-CZ-SS-2165-ST		
Sample Quantity	: 4.90800E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16984		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 10:40:12.
Decay time	: 41 10:40:12.35	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.49

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
10	73.64	218	888	2.55	146.87	142	17	53.7	3.14E+00	
10	74.87	409	596	1.04	149.33	142	17	21.9		AM-243
										PB-214
										PB-212
10	77.09	617	505	0.90	153.75	142	17	13.8		PB-214
										PB-212
1	87.16*	227	620	1.08	173.80	171	11	37.3	1.39E+00	NP-237
										PB-214
										PB-212
1	89.81*	172	508	1.11	179.08	171	11	42.1		
2	92.47*	85	495	0.91	184.36	182	8	91.1	2.58E+00	
2	93.22*	97	687	1.18	185.85	182	8	99.4		
0	185.95*	495	803	1.38	370.51	365	12	25.0		
0	209.26	143	543	0.81	416.94	413	8	58.8		AC-228
2	238.76*	1877	334	1.17	475.70	468	19	5.7	4.33E+00	PB-212
2	241.17	233	350	1.42	480.50	468	19	44.9		
2	242.19	379	299	1.09	482.54	468	19	20.0		PB-214
0	270.23*	128	449	1.50	538.38	533	10	64.6		RA-223
										AC-228
0	277.55	77	222	1.33	552.97	550	6	66.3		TL-208
0	295.39*	744	348	1.30	588.52	583	11	12.3		PB-214
0	300.38	184	317	1.30	598.46	594	10	39.0		PB-212
0	328.63	104	374	0.98	654.75	650	11	74.6		
0	338.50*	445	346	1.24	674.41	669	12	19.3		AC-228
0	352.14*	1250	370	1.26	701.59	696	12	8.4		PB-214
0	463.07	95	155	1.03	922.68	919	9	51.3		AC-228
0	511.05*	212	258	2.03	1018.32	1012	17	39.8		TL-208
0	583.24*	645	150	1.56	1162.25	1155	16	11.6		TL-208
0	609.46*	888	166	1.45	1214.55	1209	13	9.1		BI-214
0	661.77	342	164	1.66	1318.86	1310	13	18.7		CS-137
0	727.39	152	114	1.49	1449.77	1442	13	33.2		BI-212
0	768.40	45	163	0.84	1531.59	1528	12	119.8		BI-214
0	795.36	81	59	1.43	1585.37	1578	11	42.7		AC-228
0	860.33*	91	93	2.22	1715.04	1706	17	53.4		TL-208
0	911.11*	403	103	1.69	1816.39	1811	14	14.5		AC-228
0	934.51	51	74	1.61	1863.10	1855	14	75.9		BI-214
3	964.73	80	68	2.33	1923.43	1917	22	46.2	7.94E-01	AC-228
3	968.85*	279	52	1.77	1931.66	1917	22	16.0		AC-228
0	1120.30*	176	93	1.50	2234.09	2228	12	26.8		BI-214
0	1237.97	77	64	1.76	2469.16	2462	13	49.0		BI-214
0	1377.77	84	36	1.80	2748.56	2741	18	41.3		BI-214
0	1459.77*	537	26	2.29	2912.50	2905	15	9.8		K-40
0	1620.20	22	21	1.57	3233.36	3224	12	95.1		BI-212
0	1728.38	39	15	1.21	3449.81	3442	16	55.8		BI-214
0	1762.60*	167	8	2.00	3518.29	3512	12	17.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
10	73.64	218	888	2.55	146.87	142	17	2.01E-02	53.7	1.90E+00	
1	89.81	172	508	1.11	179.08	171	11	1.60E-02	42.1	2.60E+00	
2	92.47	85	495	0.91	184.36	182	8	7.86E-03	91.1	2.69E+00	T
2	93.22	97	687	1.18	185.85	182	8	8.97E-03	99.4	2.72E+00	
0	185.95	495	803	1.38	370.51	365	12	4.58E-02	25.0	3.21E+00	
2	241.17	233	350	1.42	480.50	468	19	2.16E-02	44.9	2.78E+00	
0	328.63	104	374	0.98	654.75	650	11	9.63E-03	74.6	2.20E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.804E+00	4.459E-01	1.859E-01	1.197E-02	20.467
CS-137	1.689E-01	3.698E-02	2.917E-02	3.319E-03	5.791
TL-208	2.886E-01	4.507E-02	2.439E-02	2.539E-03	11.835
BI-212	5.815E-01	2.033E-01	1.780E-01	1.946E-02	3.266
PB-212	7.891E-01	7.531E-02	4.077E-02	3.115E-03	19.355
BI-214	7.550E-01	1.057E-01	4.867E-02	5.183E-03	15.512
PB-214	8.171E-01	9.321E-02	4.733E-02	3.629E-03	17.264
RA-223	1.858E-01	1.212E-01	1.248E-01	1.110E-02	1.489
AC-228	8.378E-01	1.417E-01	8.532E-02	7.414E-03	9.820
NP-237	3.765E-01	1.483E-01	2.088E-01	2.624E-02	1.803
AM-243	1.570E-01	4.648E-02	4.443E-02	8.857E-03	3.534

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.115E-03		1.385E-02	2.221E-02	1.292E-03	0.140
RH-101	-9.655E-03		1.554E-02	2.450E-02	3.825E-03	-0.394
SB-125	1.337E-02		3.893E-02	6.715E-02	5.505E-03	0.199
EU-155	3.452E-02		5.238E-02	8.913E-02	8.345E-03	0.387
PO-209	-8.688E-01		2.731E+00	4.637E+00	8.890E-01	-0.187
BI-211	-3.815E-01		4.063E-01	6.569E-01	6.430E-02	-0.581
PA-233	1.025E-02		2.671E-02	4.653E-02	3.748E-03	0.220
PA-234M	3.627E+00		1.718E+00	3.416E+00	2.667E-01	1.062
TH-234	2.966E-01	+	2.719E-01	5.195E-01	5.196E-02	0.571
U-235	6.972E-02		9.866E-02	1.644E-01	1.200E-02	0.424
NP-236	3.392E-02		3.138E-02	5.392E-02	5.360E-03	0.629
NP-239	1.363E-02		9.155E-02	1.595E-01	2.153E-02	0.085
AM-241	5.573E-03		7.839E-02	1.342E-01	8.806E-03	0.042
CM-243	-4.670E-02		4.848E-02	7.818E-02	8.452E-03	-0.597
AM-246	5.385E-02		4.867E-02	9.159E-02	1.171E-02	0.588
CF-249	1.230E-02		1.647E-02	2.897E-02	2.775E-03	0.425

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 13:41:40

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792112_GAMMA3_400MLSAN_16985.CNF

---- Sample Information ----

Sample ID	: OH207-7921-12		
Sample Title	: SB-CZ-SS-2166-ST		
Sample Quantity	: 4.76700E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16985		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 10:41:13.
Decay time	: 41 10:41:13.28	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.09

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.39*	140	537	1.48	103.13	98	11	69.1		
0	63.09*	324	764	1.72	140.16	134	11	36.5		TH-234
1	74.88*	729	971	1.44	166.29	159	17	18.3	1.06E+00	AM-243
										PB-214
										PB-212
1	77.14*	1105	736	1.27	171.29	159	17	11.1		PB-214
										PB-212
2	87.40	422	911	1.62	194.04	183	31	30.0	1.52E+00	NP-237
										PB-214
										PB-212
2	89.99	270	898	1.62	199.78	183	31	47.0		
2	92.74*	419	879	1.63	205.88	183	31	31.7		TH-234
0	129.05	119	588	1.40	286.37	283	8	72.9		AC-228
0	185.92*	419	634	1.50	412.41	406	12	26.8		
0	209.26	211	493	1.50	464.15	459	11	42.9		AC-228
3	238.70*	1923	375	1.37	529.41	521	22	6.0	1.43E+00	PB-212
3	241.75	444	510	1.93	536.16	521	22	27.0		PB-214
0	270.26	159	501	1.48	599.35	592	14	61.9		RA-223
										AC-228
0	295.24	646	337	1.51	654.73	647	14	14.4		PB-214
0	300.78	154	249	1.57	667.00	662	11	43.0		PB-212
0	328.13	117	257	1.55	727.63	723	11	55.9		
0	338.67*	363	375	1.58	750.98	743	15	25.6		AC-228
0	352.06*	1115	295	1.46	780.67	773	13	8.7		PB-214
0	463.13	102	197	1.39	1026.86	1022	11	57.2		AC-228
0	510.98*	216	205	2.11	1132.89	1125	18	36.9		TL-208
0	583.16*	555	200	1.69	1292.87	1284	19	15.0		TL-208
0	609.41*	751	232	1.64	1351.05	1342	19	12.3		BI-214
0	661.46	224	218	1.58	1466.42	1460	17	32.8		CS-137
0	727.32	157	98	1.32	1612.38	1607	14	31.2		BI-212
0	767.93	94	94	3.28	1702.39	1697	12	46.0		BI-214
0	860.74	102	54	1.96	1908.09	1902	14	36.0		TL-208
0	911.35*	400	100	2.06	2020.24	2010	18	15.5		AC-228
1	964.84	102	47	2.22	2138.79	2131	38	37.4	1.88E+00	AC-228
1	969.09	281	50	2.04	2148.21	2131	38	16.2		AC-228
0	1120.62*	204	46	2.30	2484.03	2476	18	21.6		BI-214
5	1237.48	71	35	2.14	2743.00	2733	19	45.2	3.37E+00	BI-214
5	1239.12	54	23	2.31	2746.63	2733	19	50.9		
0	1377.69	43	33	3.66	3053.70	3045	18	67.9		BI-214
0	1460.84*	537	61	2.10	3237.97	3227	22	11.6		K-40
0	1764.77*	143	6	2.15	3911.44	3904	19	18.9		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	46.39	140	537	1.48	103.13	98	11	1.29E-02	69.1	2.76E+00	
2	89.99	270	898	1.62	199.78	183	31	2.50E-02	47.0	3.55E+00	
0	185.92	419	634	1.50	412.41	406	12	3.88E-02	26.8	2.82E+00	
0	328.13	117	257	1.55	727.63	723	11	1.09E-02	55.9	1.89E+00	
5	1239.12	54	23	2.31	2746.63	2733	19	5.02E-03	50.9	6.30E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.742E+00	6.149E-01	2.669E-01	1.570E-02	17.768
CS-137	1.317E-01	4.422E-02	3.436E-02	2.474E-03	3.831
TL-208	2.947E-01	5.006E-02	2.762E-02	2.199E-03	10.669
BI-212	7.207E-01	2.305E-01	2.462E-01	1.787E-02	2.927
PB-212	9.704E-01	9.276E-02	4.863E-02	3.635E-03	19.954
BI-214	7.586E-01	1.095E-01	5.787E-02	4.409E-03	13.110
PB-214	8.694E-01	1.028E-01	5.974E-02	4.753E-03	14.553
RA-223	2.761E-01	1.726E-01	1.553E-01	1.375E-02	1.778
AC-228	1.012E+00	1.727E-01	1.196E-01	8.407E-03	8.468
TH-234	1.144E+00	3.770E-01	3.567E-01	3.193E-02	3.208
NP-237	5.032E-01	1.608E-01	1.550E-01	1.727E-02	3.247
AM-243	1.606E-01	4.262E-02	3.031E-02	5.829E-03	5.299

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-7.909E-03		1.929E-02	2.908E-02	1.542E-03	-0.272
RH-101	-5.845E-03		1.847E-02	3.079E-02	4.752E-03	-0.190
SB-125	1.806E-02		4.812E-02	8.496E-02	7.024E-03	0.213
EU-155	4.440E-02		5.212E-02	9.127E-02	8.583E-03	0.486
PO-209	-5.163E-01		3.460E+00	6.081E+00	1.120E+00	-0.085
BI-211	-3.978E-01		5.116E-01	8.223E-01	5.922E-02	-0.484
PA-233	-2.271E-02		3.438E-02	5.588E-02	4.560E-03	-0.406
PA-234M	7.196E-01		2.112E+00	3.801E+00	2.596E-01	0.189
U-235	1.063E-01		1.123E-01	1.953E-01	1.449E-02	0.544
NP-236	3.253E-02		3.414E-02	5.014E-02	4.785E-03	0.649
NP-239	-2.221E-04		1.170E-01	1.972E-01	2.639E-02	-0.001
AM-241	5.268E-02		3.644E-02	5.556E-02	3.516E-03	0.948
CM-243	2.492E-02		4.728E-02	8.231E-02	8.870E-03	0.303
AM-246	-2.190E-02		6.381E-02	1.095E-01	1.382E-02	-0.200
CF-249	1.000E-02		2.091E-02	3.707E-02	3.692E-03	0.270

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 16:52:20

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792113_GAMMA1_400MLSAN_16986.CNF

---- Sample Information ----

Sample ID : OH207-7921-13
Sample Title : SB-CZ-SS-2167-ST
Sample Quantity : 4.60200E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 16986

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 4-NOV-2007 13:51:59.
Decay time : 41 13:51:59.72 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:02.72

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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 Mead Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	75.04	383	550	0.99	149.49	143	16	21.9	4.23E-01	AM-243
										PB-214
										PB-212
3	77.19*	575	451	0.90	153.80	143	16	14.2		PB-214
										PB-212
5	84.31*	237	523	1.52	168.05	164	28	34.5	1.69E+00	
5	87.34	343	518	1.20	174.13	164	28	24.8		NP-237
										PB-214
										PB-212
5	89.99	218	588	1.30	179.43	164	28	41.4		
0	129.34	171	689	1.02	258.23	254	10	59.6		AC-228
0	185.99*	359	699	1.34	371.67	367	10	30.1		
0	209.66	280	590	1.27	419.06	414	11	35.7		AC-228
4	238.65*	2008	342	1.10	477.11	470	18	5.5	2.37E+00	PB-212
4	241.70	508	475	1.62	483.21	470	18	21.1		PB-214
3	270.28	221	328	1.59	540.44	535	27	33.2	1.93E+00	RA-223
										AC-228
3	274.95	51	251	1.31	549.79	535	27	112.5		
3	277.00	106	215	1.22	553.89	535	27	51.2		TL-208
0	295.20	720	357	1.21	590.32	586	10	12.3		PB-214
0	300.04	110	283	0.96	600.03	596	8	56.5		PB-212
0	327.89	143	349	1.03	655.79	650	12	54.8		
0	338.22*	386	285	1.21	676.48	672	10	19.5		AC-228
0	351.83*	1370	364	1.20	703.72	697	13	7.9		PB-214
0	409.53	135	212	1.77	819.26	814	13	47.5		AC-228
0	462.42	174	261	1.95	925.15	918	16	44.2		AC-228
0	510.68*	221	230	1.45	1021.77	1015	15	35.6		TL-208
0	583.12*	699	195	1.61	1166.81	1160	16	11.9		TL-208
0	609.05*	1014	205	1.47	1218.72	1211	16	9.0		BI-214
0	661.40	273	178	1.23	1323.53	1319	12	22.7		CS-137
0	726.96	194	110	1.61	1454.80	1448	16	28.0		BI-212
0	767.97	106	135	1.75	1536.90	1529	15	51.6		BI-214
0	794.76	69	82	1.31	1590.51	1584	10	54.8		AC-228
0	860.64	107	63	1.57	1722.42	1716	13	36.6		TL-208
0	910.97*	451	66	1.77	1823.16	1817	14	12.3		AC-228
0	934.30	51	92	0.81	1869.88	1864	14	85.3		BI-214
2	964.66	87	78	2.06	1930.64	1922	23	46.6	1.93E+00	AC-228
2	968.78*	257	59	1.55	1938.90	1922	23	16.5		AC-228
0	1119.89	235	63	2.03	2241.39	2234	18	20.5		BI-214
0	1237.74	56	66	1.39	2477.29	2471	11	62.1		BI-214
0	1377.43	75	19	2.40	2756.90	2751	11	32.4		BI-214
0	1407.95	61	17	1.10	2817.98	2811	17	40.2		BI-214
0	1460.28*	530	45	1.88	2922.73	2914	16	10.5		K-40
0	1589.71	50	56	0.94	3181.78	3173	20	77.6		AC-228
0	1728.75	36	29	2.33	3460.06	3453	16	74.7		BI-214
0	1763.82*	147	24	2.29	3530.26	3521	19	23.3		BI-214
0	1847.83	35	23	4.71	3698.38	3691	16	70.4		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	84.31	237	523	1.52	168.05	164	28	2.19E-02	34.5	2.11E+00	
5	89.99	218	588	1.30	179.43	164	28	2.02E-02	41.4	2.33E+00	
0	185.99	359	699	1.34	371.67	367	10	3.33E-02	30.1	3.03E+00	
3	274.95	51	251	1.31	549.79	535	27	4.71E-03	****	2.41E+00	
0	327.89	143	349	1.03	655.79	650	12	1.32E-02	54.8	2.11E+00	
0	1847.83	35	23	4.71	3698.38	3691	16	3.27E-03	70.4	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.823E+00	4.777E-01	1.982E-01	1.353E-02	19.289
CS-137	1.443E-01	3.628E-02	2.877E-02	3.092E-03	5.015
TL-208	3.377E-01	5.248E-02	2.340E-02	2.348E-03	14.435
BI-212	7.871E-01	2.332E-01	1.921E-01	1.848E-02	4.097
PB-212	9.490E-01	8.977E-02	4.241E-02	3.273E-03	22.376
BI-214	9.279E-01	1.259E-01	4.736E-02	4.824E-03	19.591
PB-214	9.953E-01	1.113E-01	4.981E-02	3.930E-03	19.984
RA-223	3.592E-01	1.237E-01	1.228E-01	1.130E-02	2.925
AC-228	9.766E-01	1.318E-01	8.788E-02	4.856E-03	11.113
NP-237	6.859E-01	1.966E-01	2.076E-01	3.002E-02	3.304
AM-243	1.830E-01	5.555E-02	5.095E-02	1.069E-02	3.593

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.104E-02		1.563E-02	2.444E-02	1.595E-03	-0.452
RH-101	-8.298E-03		1.595E-02	2.585E-02	4.009E-03	-0.321
SB-125	2.143E-02		4.103E-02	7.212E-02	5.915E-03	0.297
EU-155	3.894E-02		5.780E-02	9.974E-02	9.902E-03	0.390
PO-209	-1.886E+00		2.901E+00	4.797E+00	8.586E-01	-0.393
BI-211	-2.500E-01		4.034E-01	6.769E-01	4.932E-02	-0.369
PA-233	3.991E-03		2.774E-02	4.844E-02	4.068E-03	0.082
PA-234M	5.802E-01		1.671E+00	3.001E+00	1.725E-01	0.193
TH-234	1.201E+00		3.400E-01	5.836E-01	6.809E-02	2.058
U-235	6.917E-02		1.012E-01	1.714E-01	1.197E-02	0.403
NP-236	3.949E-02		3.716E-02	5.869E-02	6.447E-03	0.673
NP-239	-1.309E-02		1.070E-01	1.737E-01	2.343E-02	-0.075
AM-241	-8.534E-02		9.111E-02	1.530E-01	1.217E-02	-0.558
CM-243	4.179E-02		5.151E-02	8.928E-02	1.017E-02	0.468
AM-246	-1.961E-02		5.059E-02	8.492E-02	1.045E-02	-0.231
CF-249	4.645E-03		1.748E-02	3.044E-02	2.937E-03	0.153

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 16:53:16

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792114_GAMMA2_400MLSAN_16987.CNF

---- Sample Information ----

Sample ID	: OH207-7921-14		
Sample Title	: SB-CZ-SS-2168-ST		
Sample Quantity	: 5.00700E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16987		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 13:52:57.
Decay time	: 41 13:52:57.25	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.67

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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 Mont Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.82	524	772	0.99	149.23	145	14	18.8	1.87E+00	AM-243
										PB-214
										PB-212
3	77.08	826	717	1.06	153.72	145	14	12.6		PB-214
										PB-212
4	87.25*	413	793	1.41	173.98	164	30	25.6	1.76E+00	NP-237
										PB-214
										PB-212
4	92.72*	419	837	1.46	184.86	164	30	28.0		
0	128.67	115	784	1.27	256.44	254	8	85.9		AC-228
0	153.70	102	699	1.00	306.29	303	8	91.9		
0	185.98*	431	893	1.29	370.59	365	12	29.8		
1	208.74	140	415	1.27	415.92	413	9	50.8	4.73E+00	
1	209.67	128	573	1.30	417.76	413	9	68.6		AC-228
2	238.77*	2420	458	1.11	475.72	471	17	5.0	2.75E+00	PB-212
2	241.15	282	399	1.21	480.46	471	17	32.6		
2	242.18	278	336	1.08	482.52	471	17	26.9		PB-214
1	270.66*	126	412	1.38	539.25	534	16	59.4	2.61E+00	RA-223
										AC-228
2	277.29	71	202	1.18	552.45	550	9	67.1	1.86E+00	TL-208
2	277.80	66	289	1.53	553.47	550	9	92.1		
0	295.35*	641	360	1.22	588.44	583	10	13.7		PB-214
0	300.69	175	419	1.21	599.08	594	11	47.8		PB-212
0	328.36	155	386	1.58	654.20	650	11	51.7		
0	338.42*	434	412	1.18	674.24	669	11	20.6		AC-228
0	352.07*	1143	420	1.36	701.44	694	15	9.9		PB-214
0	409.67	58	224	0.77	816.25	813	8	92.4		AC-228
0	463.76	133	278	0.92	924.06	918	12	53.5		AC-228
0	511.03*	323	300	2.00	1018.29	1010	18	29.1		TL-208
0	583.30*	840	191	1.43	1162.37	1155	15	10.0		TL-208
0	609.47*	864	218	1.53	1214.57	1208	16	10.4		BI-214
0	661.60	143	157	1.76	1318.53	1310	13	39.6		CS-137
0	727.79	208	93	1.22	1450.56	1446	12	23.5		BI-212
4	768.25	84	104	2.24	1531.29	1527	28	46.6	1.71E+00	BI-214
4	772.15	51	127	2.40	1539.07	1527	28	104.3		
0	787.69	90	137	6.11	1570.08	1561	18	66.1		
0	795.16	127	81	1.55	1584.97	1580	14	35.2		AC-228
0	860.49*	118	94	1.82	1715.35	1709	16	41.2		TL-208
0	911.09*	504	60	1.87	1816.35	1810	12	11.0		AC-228
2	964.39	144	39	2.05	1922.75	1918	22	24.4	8.22E-01	AC-228
2	968.78*	337	56	1.81	1931.50	1918	22	14.0		AC-228
0	1120.01*	202	77	1.71	2233.50	2227	17	24.5		BI-214
0	1237.20	92	57	2.53	2467.63	2460	14	41.1		BI-214
0	1280.64	40	50	1.67	2554.42	2548	15	83.2		BI-214
0	1377.78	30	59	1.88	2748.57	2740	13	112.1		BI-214
0	1407.14	31	28	1.24	2807.27	2802	10	72.5		BI-214
0	1459.82*	782	30	1.96	2912.59	2904	20	8.1		K-40
0	1728.14	38	5	1.39	3449.34	3444	10	39.2		BI-214
0	1762.65*	141	7	2.27	3518.40	3511	14	19.4		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	92.72	419	837	1.46	184.86	164	30	3.88E-02	28.0	2.70E+00	T
0	153.70	102	699	1.00	306.29	303	8	9.49E-03	91.9	3.38E+00	
0	185.98	431	893	1.29	370.59	365	12	3.99E-02	29.8	3.21E+00	
1	208.74	140	415	1.27	415.92	413	9	1.29E-02	50.8	3.04E+00	
2	241.15	282	399	1.21	480.46	471	17	2.61E-02	32.6	2.78E+00	
2	277.80	66	289	1.53	553.47	550	9	6.10E-03	92.1	2.51E+00	
0	328.36	155	386	1.58	654.20	650	11	1.44E-02	51.7	2.20E+00	
4	772.15	51	127	2.40	1539.07	1527	28	4.69E-03	****	1.08E+00	
0	787.69	90	137	6.11	1570.08	1561	18	8.29E-03	66.1	1.06E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.433E+00	5.601E-01	1.923E-01	1.238E-02	28.248
CS-137	6.939E-02	2.861E-02	2.874E-02	3.270E-03	2.414
TL-208	3.685E-01	5.324E-02	2.297E-02	2.392E-03	16.041
BI-212	7.817E-01	2.025E-01	1.912E-01	2.091E-02	4.088
PB-212	9.970E-01	9.122E-02	4.286E-02	3.275E-03	23.259
BI-214	7.201E-01	1.069E-01	4.648E-02	4.949E-03	15.494
PB-214	7.321E-01	9.159E-02	4.649E-02	3.565E-03	15.747
RA-223	1.788E-01	1.075E-01	1.272E-01	1.132E-02	1.405
AC-228	1.026E+00	1.435E-01	8.403E-02	7.302E-03	12.216
NP-237	6.721E-01	1.918E-01	1.956E-01	2.458E-02	3.436
AM-243	1.973E-01	5.402E-02	4.843E-02	9.653E-03	4.074

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-6.784E-03		1.415E-02	2.311E-02	1.345E-03	-0.293
RH-101	6.680E-03		1.567E-02	2.564E-02	4.003E-03	0.261
SB-125	6.733E-03		4.015E-02	6.850E-02	5.616E-03	0.098
EU-155	6.632E-02		5.708E-02	9.765E-02	9.143E-03	0.679
PO-209	1.929E+00		2.662E+00	4.869E+00	9.335E-01	0.396
BI-211	-1.053E-01		4.393E-01	7.500E-01	7.341E-02	-0.140
PA-233	-2.377E-03		2.733E-02	4.668E-02	3.760E-03	-0.051
PA-234M	5.976E-01		1.672E+00	2.993E+00	2.336E-01	0.200
TH-234	1.435E+00	+	4.266E-01	5.435E-01	5.436E-02	2.640
U-235	4.056E-02		9.858E-02	1.629E-01	1.189E-02	0.249
NP-236	2.849E-02		3.532E-02	5.427E-02	5.394E-03	0.525
NP-239	5.538E-02		9.458E-02	1.662E-01	2.243E-02	0.333
AM-241	-4.761E-02		8.011E-02	1.343E-01	8.811E-03	-0.354
CM-243	3.617E-02		5.105E-02	8.667E-02	9.370E-03	0.417
AM-246	2.585E-02		5.210E-02	9.315E-02	1.191E-02	0.277
CF-249	2.399E-02		1.729E-02	3.091E-02	2.961E-03	0.776

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:	9/27/2007	Client Project Manager:	Greg Miller
SC&A Project Manager:			
S7921 7924			

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7922-PB		9/27/2007 8:45:00 AM	
SCAQC	7922-LD1 OH207-7922-01	SB-CZ-SS-2155-SD	9/24/2007	
SCAQC	7922-LC1		9/27/2007 8:45:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7922-01	SB-CZ-SS-2155-SD	9/24/2007	
OH207	7922-02	SB-CZ-SS-2156-SD	9/24/2007	
OH207	7922-03	SB-CZ-SS-2157-SD	9/24/2007	
OH207	7922-04	SB-CZ-SS-2158-SD	9/24/2007	
OH207	7922-05	SB-CZ-SS-2159-SD	9/24/2007	
OH207	7922-06	SB-CZ-SS-2160-SD	9/24/2007	
OH207	7922-07	SB-CZ-SS-2161-SD	9/24/2007	
OH207	7922-08	SB-CZ-SS-2162-SD	9/24/2007	
OH207	7922-09	SB-CZ-SS-2163-SD	9/24/2007	
OH207	7922-10	SB-CZ-SS-2164-SD	9/24/2007	
OH207	7922-11	SB-CZ-SS-2165-SD	9/24/2007	
OH207	7922-12	SB-CZ-SS-2166-SD	9/24/2007	
OH207	7922-13	SB-CZ-SS-2167-SD	9/24/2007	
OH207	7922-14	SB-CZ-SS-2168-SD	9/24/2007	

Radiochemistry Reviewer 11/07/07 Date

QA Reviewer 11/07/2007 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
11-4-07 1039 G1	180	OH207	7921	10	—	9-24-07	SB-CZ-SS-2164-ST	SOIL	491.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 1040 G2				11	—		2165-ST		490.8 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 1041 G3				12	—		2166-ST		476.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 1250 G1 IC				13	—		2167-ST		460.2 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 1250 G2 IC				14	—		2168-ST		500.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 1251 G3 IC	180	SCAQC	7922	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 2000 G1 IC	60			LG1	—		CTRLSAMP S-142	SOIL	640 g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 1605 G1	180			LD1	—	9-24-07	DUP 7922-01	SOIL	397.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 2000 G3 IC		OH207		D1	—		SB-CZ-SS-2155-SD		397.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐
11-4-07 1605 G2		OH207		D2	—		2156-SD		519.3 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐ _____ ☐

amp1 = G1
amp2 = G2

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SCA-Form 012 Rev. 1

Page 246

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
11-4-07 1606 G2K	180	OH207	7922	03	-	9-24-07	SB-CZ-SS-2157-SD	SOIL	555.1 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1000 G2K				04	-		2158-SD		480.0 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 1200 G1K				05	-		2159-SD		516.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 2301 G2K				06	-		2160-SD		509.6 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-4-07 2302 G2K				07	-		2161-SD		460.7 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 1049 G1K				08	-		2162-SD		478.5 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 1050 G2				09	-		2163-SD		524.7 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 1052 G3				10	-		2164-SD		441.0 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 1353 G1				11	-		2165-SD		543.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 1354 G2	↓	↓	↓	12	-	↓	2166-SD	↓	478.7 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐

amm1 = G1
amm2 = G2

Page 247

SC&A - Southeastern Environmental Laboratory
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
11-05-07 1356 G3	180	OH207	7922	13	—	9-24-07	SB-CZ-SS-2167-SD	SOIL	553.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 G1	180	OH207	7922	14	—	9-24-07	2168-SD		434.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1958 G2	180	SCAQC	7923	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1655 G3	60			LC1	—		CTRL SAMP S-142	SOIL	640 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1657 G2	180			LD1	—	9-24-07	DUP 7923-01	SOIL	484.9 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 2020 G1	0	OH207		01	—		SB-CZ-SS-2169-ST		~~479.8~~ 484.9 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 2020 G3				02	—		2170-ST		479.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G1 MW				03	—		2171-ST		332.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G2 MW				04	—		2172-ST		470.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G3 MW	480	SCAQC	7924	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐

Sample1 = G1
Sample2 = G2

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SCA-Form 012 Rev. 1

Page 248

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 16:54:03

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7922PB1_GAMMA3_400MLSA_16988.CNF

---- Sample Information ----

Sample ID	: SCAQC-7922-PB1		
Sample Title	: PREP BLK		
Sample Quantity	: 4.00000E+02 G		
Sample Type	: LIQUID		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16988		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 4-NOV-2007 13:53:46.
Decay time	: 38 05:08:46.92	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:00.52

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	352.40*	48	79	1.93	781.41	773	12	82.3		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	352.40	48	79	1.93	781.41	773	12	4.43E-03	82.3	1.79E+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	8.327E-03		1.774E-01	3.411E-01	2.007E-02	0.024
CO-60	2.090E-03		1.287E-02	2.276E-02	1.207E-03	0.092
RH-101	-2.694E-03		1.234E-02	2.078E-02	3.208E-03	-0.130
SB-125	-2.479E-03		3.255E-02	5.788E-02	4.785E-03	-0.043
CS-137	1.387E-03		1.244E-02	2.249E-02	1.619E-03	0.062
EU-155	8.970E-03		3.298E-02	5.852E-02	5.503E-03	0.153
TL-208	-2.518E-03		1.360E-02	2.453E-02	1.952E-03	-0.103
PO-209	-6.173E-01		2.339E+00	4.204E+00	7.746E-01	-0.147
BI-211	1.358E-01		3.974E-01	7.256E-01	5.225E-02	0.187
BI-212	3.701E-02		1.039E-01	1.901E-01	1.380E-02	0.195
PB-212	-1.443E-02		2.413E-02	4.042E-02	3.021E-03	-0.357
BI-214	6.840E-03		2.923E-02	5.242E-02	3.994E-03	0.130
PB-214	4.444E-02	+	3.673E-02	5.177E-02	4.119E-03	0.858
RA-223	4.377E-02		6.546E-02	1.167E-01	1.033E-02	0.375
AC-228	3.208E-02		5.293E-02	1.036E-01	7.285E-03	0.310
PA-233	2.718E-03		2.249E-02	3.899E-02	3.182E-03	0.070
PA-234M	3.252E-01		1.539E+00	2.853E+00	1.948E-01	0.114
TH-234	8.721E-02		1.915E-01	3.601E-01	3.224E-02	0.242
U-235	3.066E-03		7.503E-02	1.303E-01	9.668E-03	0.024
NP-236	1.329E-02		1.820E-02	3.142E-02	2.998E-03	0.423
NP-237	-5.669E-02		5.764E-02	9.045E-02	1.008E-02	-0.627
NP-239	-1.738E-02		8.107E-02	1.376E-01	1.841E-02	-0.126
AM-241	-9.835E-02		2.570E-02	3.364E-02	2.129E-03	-2.923
AM-243	-2.952E-03		1.245E-02	2.001E-02	3.849E-03	-0.148
CM-243	-1.585E-03		2.962E-02	5.186E-02	5.588E-03	-0.031
AM-246	1.263E-02		4.831E-02	9.108E-02	1.150E-02	0.139
CF-249	2.401E-03		1.478E-02	2.664E-02	2.653E-03	0.090

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 22:02:12

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7922LC1_GAMMA1_400MLSA_16992.CNF

---- Sample Information ----

Sample ID	: SCAQC-7922-LC1		
Sample Title	: CTRL SAMP S-142		
Sample Quantity	: 6.40000E+02 G		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16992		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 4-NOV-2007 21:01:41.
Decay time	: 38 12:16:41.87	% dead time	: 0.4%
Elapsed live time	: 0 01:00:00.00	Elapsed real time	: 0 01:00:14.90

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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 Mont Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	56.82	203	905	0.89	113.00	112	14	32.4	7.29E+00	
3	57.90	549	5113	0.98	115.18	112	14	41.0		
3	59.68	20268	3483	0.94	118.73	112	14	1.7		AM-241
0	88.14	9698	5165	1.00	175.73	170	12	3.6		
0	122.02	1936	3258	1.09	243.57	238	10	11.9		
0	136.68	205	2815	1.03	272.92	269	8	90.5		
0	238.76*	239	2139	0.82	477.32	474	7	65.8		
0	582.82*	121	869	0.94	1166.21	1163	8	86.8		
0	609.62*	156	950	1.84	1219.86	1215	9	73.3		
0	661.41	26953	1320	1.44	1323.55	1316	14	1.3		CS-137
0	1172.70	21360	821	1.83	2347.10	2338	19	1.5		CO-60
0	1331.86	19647	277	2.00	2665.70	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
3	56.82	203	905	0.89	113.00	112	14	5.63E-02	32.4	7.65E-01	
3	57.90	549	5113	0.98	115.18	112	14	1.53E-01	41.0	8.18E-01	
0	88.14	9698	5165	1.00	175.73	170	12	2.69E+00	3.6	2.26E+00	T
0	122.02	1936	3258	1.09	243.57	238	10	5.38E-01	11.9	3.05E+00	
0	136.68	205	2815	1.03	272.92	269	8	5.70E-02	90.5	3.16E+00	
0	238.76	239	2139	0.82	477.32	474	7	6.63E-02	65.8	2.66E+00	T
0	582.82	121	869	0.94	1166.21	1163	8	3.35E-02	86.8	1.33E+00	T
0	609.62	156	950	1.84	1219.86	1215	9	4.33E-02	73.3	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	3.085E+01	1.940E+00	8.604E-02	5.615E-03	358.588
CS-137	3.071E+01	3.325E+00	1.602E-01	1.722E-02	191.613
AM-241	7.361E+01	5.985E+00	9.965E-01	7.922E-02	73.868

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

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	4.618E-01		3.873E-01	7.453E-01	5.087E-02	0.620
RH-101	-5.406E-02		7.638E-02	1.215E-01	1.885E-02	-0.445
SB-125	3.273E-01		2.736E-01	4.625E-01	3.793E-02	0.708
EU-155	-1.635E-01		2.549E-01	4.209E-01	4.179E-02	-0.388
TL-208	1.257E-01	+	1.098E-01	1.617E-01	1.623E-02	0.777
PO-209	-1.318E+01		2.452E+01	4.038E+01	7.226E+00	-0.326
BI-211	-1.572E+00		3.033E+00	5.048E+00	3.678E-01	-0.311
BI-212	-3.598E-01		7.164E-01	1.205E+00	1.159E-01	-0.299
PB-212	2.431E-01	+	1.610E-01	2.341E-01	1.807E-02	1.038
BI-214	3.076E-01	+	2.277E-01	3.101E-01	3.159E-02	0.992
PB-214	2.369E-01		1.788E-01	3.063E-01	2.417E-02	0.773
RA-223	3.359E-02		4.147E-01	7.100E-01	6.534E-02	0.047
AC-228	6.314E-01		4.609E-01	7.889E-01	4.360E-02	0.800
PA-233	-8.424E-02		1.575E-01	2.647E-01	2.223E-02	-0.318
PA-234M	5.362E+00		1.381E+01	2.313E+01	1.329E+00	0.232
TH-234	8.897E-01		1.260E+00	1.928E+00	2.249E-01	0.462
U-235	1.996E-01		4.415E-01	7.319E-01	5.110E-02	0.273
NP-236	-1.239E-02		1.464E-01	2.452E-01	2.693E-02	-0.051
NP-237	1.400E+01		2.170E+00	1.538E+00	2.224E-01	9.104
NP-239	-1.104E-01		5.607E-01	8.962E-01	1.209E-01	-0.123
AM-243	-1.050E-01		1.462E-01	2.424E-01	5.085E-02	-0.433
CM-243	1.088E-01		2.337E-01	3.932E-01	4.481E-02	0.277
AM-246	-3.188E-02		4.230E-01	6.972E-01	8.581E-02	-0.046
CF-249	-9.052E-03		1.066E-01	1.784E-01	1.721E-02	-0.051

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 20:05:50

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7922LD1_GAMMA1_400MLSA_16989.CNF

---- Sample Information ----

Sample ID : SCAQC-7922-LD1
Sample Title : DUP 7922-01
Sample Quantity : 3.97600E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 16989

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 4-NOV-2007 17:05:31.
Decay time : 41 17:05:31.95 % 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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 Mont Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.95	371	427	0.90	149.31	145	15	19.4	4.64E-01	AM-243
										PB-214
										PB-212
2	77.25*	622	438	0.96	153.91	145	15	13.7		PB-214
										PB-212
2	86.94	123	513	0.92	173.32	171	7	63.0	3.97E+00	NP-237
2	87.62	129	504	0.96	174.68	171	7	60.2		PB-214
										PB-212
4	90.16	125	423	0.83	179.76	177	13	51.6	1.66E+00	
4	92.99*	253	644	1.31	185.44	177	13	38.3		
0	129.31	96	452	0.94	258.16	255	7	76.6		AC-228
0	185.98*	253	605	1.15	371.64	367	11	40.7		
0	209.62	196	454	1.07	418.97	415	10	43.1		AC-228
1	238.65*	1948	227	1.05	477.10	470	18	5.2	1.35E+00	PB-212
1	241.07	222	235	1.22	481.96	470	18	36.6		
1	242.03	166	228	1.12	483.88	470	18	38.7		PB-214
0	270.23	214	353	1.32	540.33	535	12	37.6		RA-223
										AC-228
0	295.09	522	258	1.29	590.11	584	12	15.1		PB-214
0	299.95	111	203	1.26	599.85	596	8	48.3		PB-212
0	327.85	127	229	1.00	655.71	651	10	47.8		
0	338.31*	429	343	1.16	676.66	670	14	20.8		AC-228
0	351.91*	706	286	1.20	703.88	699	12	12.3		PB-214
0	463.10	150	166	1.09	926.50	921	12	37.9		AC-228
0	510.93*	264	251	2.03	1022.27	1014	18	33.1		TL-208
0	563.27	38	139	0.80	1127.07	1120	11	124.0		
0	583.06*	656	116	1.39	1166.69	1162	13	10.4		TL-208
0	609.10*	533	226	1.34	1218.83	1213	14	15.0		BI-214
0	726.99	162	117	1.90	1454.85	1446	15	32.9		BI-212
0	785.82	46	97	1.66	1572.62	1565	14	96.1		BI-212
0	795.46	84	147	1.52	1591.92	1584	17	70.0		AC-228
0	860.40	64	52	1.10	1721.93	1718	8	46.6		TL-208
0	910.85*	481	54	1.49	1822.92	1817	12	11.1		AC-228
2	964.49	97	47	1.95	1930.31	1921	34	35.6	1.25E+00	AC-228
2	968.59*	291	41	1.82	1938.51	1921	34	14.8		AC-228
0	1120.06	119	43	1.72	2241.73	2236	13	29.0		BI-214
0	1377.22	50	30	2.05	2756.47	2747	17	56.9		BI-214
0	1460.22*	477	55	2.19	2922.61	2914	16	11.7		K-40
0	1763.63*	98	11	2.23	3529.87	3522	15	25.8		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	90.16	125	423	0.83	179.76	177	13	1.16E-02	51.6	2.33E+00	
4	92.99	253	644	1.31	185.44	177	13	2.34E-02	38.3	2.43E+00	T
0	185.98	253	605	1.15	371.64	367	11	2.34E-02	40.7	3.03E+00	
1	241.07	222	235	1.22	481.96	470	18	2.05E-02	36.6	2.64E+00	
0	327.85	127	229	1.00	655.71	651	10	1.18E-02	47.8	2.11E+00	
0	563.27	38	139	0.80	1127.07	1120	11	3.54E-03	****	1.37E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.978E+00	5.379E-01	2.412E-01	1.646E-02	16.490
TL-208	3.670E-01	5.306E-02	2.619E-02	2.629E-03	14.010
BI-212	7.636E-01	2.621E-01	2.297E-01	2.210E-02	3.324
PB-212	1.065E+00	9.901E-02	4.443E-02	3.429E-03	23.976
BI-214	5.644E-01	1.021E-01	5.160E-02	5.256E-03	10.938
PB-214	5.934E-01	8.666E-02	5.177E-02	4.085E-03	11.463
RA-223	4.026E-01	1.557E-01	1.373E-01	1.263E-02	2.933
AC-228	1.206E+00	1.499E-01	9.475E-02	5.236E-03	12.727
NP-237	2.848E-01	1.842E-01	2.653E-01	3.837E-02	1.074
AM-243	2.049E-01	5.859E-02	5.578E-02	1.170E-02	3.673

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-6.194E-03		1.629E-02	2.725E-02	1.663E-03	-0.227
RH-101	-4.990E-03		1.719E-02	2.823E-02	4.378E-03	-0.177
SB-125	2.515E-03		4.074E-02	7.055E-02	5.785E-03	0.036
CS-137	3.088E-03		1.811E-02	3.242E-02	3.484E-03	0.095
EU-155	1.116E-01		6.368E-02	1.125E-01	1.117E-02	0.992
PO-209	4.280E-01		2.821E+00	5.073E+00	9.079E-01	0.084
BI-211	-2.105E-02		4.623E-01	8.119E-01	5.915E-02	-0.026
PA-233	-1.482E-02		2.924E-02	4.970E-02	4.173E-03	-0.298
PA-234M	7.055E-01		1.784E+00	3.242E+00	1.863E-01	0.218
TH-234	1.218E+00	+	4.881E-01	6.499E-01	7.582E-02	1.874
U-235	6.582E-02		1.073E-01	1.820E-01	1.270E-02	0.362
NP-236	4.250E-02		3.579E-02	6.285E-02	6.904E-03	0.676
NP-239	-2.406E-02		1.124E-01	1.821E-01	2.456E-02	-0.132
AM-241	-5.525E-03		9.883E-02	1.717E-01	1.365E-02	-0.032
CM-243	3.046E-02		5.820E-02	1.003E-01	1.143E-02	0.304
AM-246	2.866E-02		5.224E-02	9.627E-02	1.185E-02	0.298
CF-249	-9.614E-03		1.903E-02	3.192E-02	3.079E-03	-0.301

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 00:03:16

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792201_GAMMA3_400MLSAN_16993.CNF

---- Sample Information ----

Sample ID	: OH207-7922-01		
Sample Title	: SB-CZ-SS-2155-SD		
Sample Quantity	: 3.97600E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16993		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 21:02:50.
Decay time	: 41 21:02:50.10	% 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:

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

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.31*	157	879	1.11	140.64	135	12	80.3		TH-234
2	74.83*	773	798	1.59	166.18	157	20	17.5	3.40E+00	AM-243
										PB-214
										PB-212
2	77.18*	1162	717	1.48	171.39	157	20	11.2		PB-214
										PB-212
0	84.29*	184	568	1.38	187.14	184	7	46.2		
0	86.90	209	679	1.06	192.94	191	7	43.2		NP-237
										PB-214
										PB-212
3	89.94	247	432	1.12	199.68	197	17	27.4	1.13E+00	
3	92.98*	398	875	1.79	206.40	197	17	34.1		TH-234
0	105.24	89	488	1.64	233.59	230	8	89.0		CM-243
										EU-155
0	128.85	143	723	1.17	285.93	279	12	77.2		AC-228
0	186.01*	248	514	1.30	412.61	407	11	39.3		
0	209.19	246	427	1.60	463.98	458	12	36.0		AC-228
5	238.69*	1784	327	1.41	529.39	522	20	6.2	1.73E+00	PB-212
5	241.54	465	303	2.43	535.70	522	20	23.1		PB-214
0	270.23	201	315	2.29	599.30	593	12	38.0		RA-223
										AC-228
0	295.33	390	348	1.63	654.92	646	16	23.7		PB-214
0	300.71	160	243	1.37	666.85	662	12	42.2		PB-212
0	328.35	131	271	1.55	728.11	722	13	54.5		
0	338.32*	392	306	1.50	750.22	742	15	22.0		AC-228
0	352.07*	641	210	1.52	780.69	775	12	12.1		PB-214
0	409.86	63	202	1.03	908.78	904	12	93.4		AC-228
0	462.97	110	175	1.65	1026.50	1020	16	57.2		AC-228
0	511.03*	245	160	2.54	1133.01	1125	17	29.8		TL-208
0	583.24*	551	182	1.49	1293.06	1286	16	14.1		TL-208
0	609.37*	407	192	1.54	1350.97	1343	18	19.0		BI-214
0	728.37	109	152	1.58	1614.70	1606	19	58.0		BI-212
0	794.74	95	59	1.05	1761.81	1753	17	42.6		AC-228
0	860.21	53	61	1.71	1906.90	1901	12	64.1		TL-208
0	911.31*	413	49	1.64	2020.15	2013	16	12.6		AC-228
0	969.83	165	136	1.81	2149.85	2141	13	32.8		AC-228
0	1120.33*	113	50	1.92	2483.38	2474	20	36.5		BI-214
0	1460.96*	414	28	2.04	3238.22	3226	22	12.1		K-40
0	1590.32*	54	39	2.00	3524.89	3515	22	65.0		AC-228
0	1731.28	19	16	1.30	3837.22	3825	15	101.5		BI-214
0	1764.98*	88	11	2.14	3911.90	3902	22	29.6		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	84.29	184	568	1.38	187.14	184	7	1.70E-02	46.2	3.55E+00	
3	89.94	247	432	1.12	199.68	197	17	2.29E-02	27.4	3.55E+00	
0	186.01	248	514	1.30	412.61	407	11	2.29E-02	39.3	2.81E+00	
0	328.35	131	271	1.55	728.11	722	13	1.22E-02	54.5	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.381E+00	5.890E-01	2.922E-01	1.719E-02	14.993
EU-155	7.624E-02	6.825E-02	9.910E-02	9.318E-03	0.769
TL-208	3.510E-01	5.669E-02	3.566E-02	2.838E-03	9.844
BI-212	6.017E-01	3.517E-01	2.575E-01	1.869E-02	2.337
PB-212	1.079E+00	1.046E-01	5.295E-02	3.958E-03	20.378
BI-214	4.928E-01	1.010E-01	6.767E-02	5.156E-03	7.282
PB-214	5.991E-01	8.682E-02	6.761E-02	5.379E-03	8.860
RA-223	4.190E-01	1.637E-01	1.770E-01	1.567E-02	2.368
AC-228	1.255E+00	1.806E-01	1.072E-01	7.534E-03	11.711
TH-234	1.304E+00	4.598E-01	3.834E-01	3.433E-02	3.402
NP-237	2.993E-01	1.335E-01	1.815E-01	2.022E-02	1.650
AM-243	2.042E-01	5.303E-02	3.372E-02	6.486E-03	6.054
CM-243	6.918E-02	6.205E-02	9.315E-02	1.004E-02	0.743

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.544E-02		2.066E-02	3.356E-02	1.780E-03	0.460
RH-101	-1.773E-03		1.973E-02	3.320E-02	5.124E-03	-0.053
SB-125	-2.853E-02		5.356E-02	9.085E-02	7.511E-03	-0.314
CS-137	3.397E-03		2.293E-02	3.973E-02	2.860E-03	0.086
PO-209	-5.293E-01		4.179E+00	7.354E+00	1.355E+00	-0.072
BI-211	-2.238E-01		5.987E-01	9.959E-01	7.173E-02	-0.225
PA-233	-2.151E-02		3.627E-02	5.919E-02	4.830E-03	-0.363
PA-234M	8.162E-01		2.354E+00	4.262E+00	2.910E-01	0.192
U-235	-3.124E-02		1.226E-01	2.079E-01	1.543E-02	-0.150
NP-236	4.683E-02		3.771E-02	5.615E-02	5.358E-03	0.834
NP-239	8.471E-02		1.312E-01	2.259E-01	3.022E-02	0.375
AM-241	1.150E-02		4.170E-02	6.109E-02	3.866E-03	0.188
AM-246	-5.971E-02		6.517E-02	1.054E-01	1.331E-02	-0.566
CF-249	-1.080E-02		2.185E-02	3.730E-02	3.715E-03	-0.289

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 20:06:50

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792202_GAMMA2_400MLSAN_16990.CNF

---- Sample Information ----

Sample ID	: OH207-7922-02		
Sample Title	: SB-CZ-SS-2156-SD		
Sample Quantity	: 5.19300E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16990		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 17:06:31.
Decay time	: 41 17:06:31.91	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.70

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.74	459	660	1.02	149.07	142	15	20.2	2.29E+00	AM-243
										PB-214
										PB-212
2	77.06	776	650	1.03	153.68	142	15	12.7		PB-214
										PB-212
0	84.04*	131	685	1.05	167.57	165	6	66.3		
0	87.11*	265	673	1.17	173.70	171	6	33.6		NP-237
										PB-214
										PB-212
1	89.88*	230	527	1.09	179.20	177	16	32.1	3.31E+00	
1	93.19*	179	573	1.01	185.80	177	16	50.0		
0	186.16*	520	862	1.33	370.94	366	11	23.9		
0	209.44	207	711	1.33	417.29	413	10	50.0		AC-228
5	238.77*	2143	412	1.14	475.72	469	20	5.4	1.88E+00	PB-212
5	241.89	656	512	1.75	481.95	469	20	16.7		PB-214
0	270.47*	211	450	2.07	538.88	534	10	40.4		RA-223
										AC-228
0	277.79	85	326	1.07	553.46	550	7	73.3		TL-208
0	295.43*	878	400	1.25	588.59	584	10	11.0		PB-214
0	300.62	189	302	1.47	598.95	595	9	36.4		PB-212
0	328.07	107	319	1.47	653.64	650	9	63.7		
0	338.57*	405	304	1.19	674.55	670	8	18.1		AC-228
0	352.16*	1514	403	1.30	701.62	697	12	7.5		PB-214
0	463.31	251	208	1.61	923.16	915	16	28.6		AC-228
0	510.97*	279	236	1.68	1018.16	1010	15	28.9		TL-208
0	583.26*	701	236	1.45	1162.30	1154	16	12.4		TL-208
0	609.54*	1144	194	1.31	1214.71	1207	16	8.1		BI-214
0	662.71	163	182	1.98	1320.74	1314	16	40.3		CS-137
0	727.27	176	90	1.98	1449.53	1443	11	25.8		BI-212
0	768.36	114	87	1.60	1531.51	1527	10	36.2		BI-214
0	794.95	80	118	1.13	1584.57	1579	13	60.3		AC-228
0	860.74*	107	65	2.03	1715.84	1710	11	35.5		TL-208
0	911.00*	499	89	1.56	1816.17	1808	15	12.3		AC-228
0	934.57	67	86	1.49	1863.21	1855	15	65.2		BI-214
4	964.72	101	51	1.92	1923.40	1916	25	34.0	1.50E+00	AC-228
4	968.86*	338	41	1.80	1931.67	1916	25	13.4		AC-228
0	1120.28*	293	77	2.02	2234.05	2226	19	18.9		BI-214
0	1237.98	87	67	1.93	2469.19	2462	13	44.7		BI-214
0	1376.94	86	32	1.62	2746.91	2739	16	36.5		BI-214
0	1459.85*	445	57	1.89	2912.67	2906	17	12.7		K-40
0	1728.45	51	13	2.52	3449.95	3441	17	42.3		BI-214
0	1762.63*	188	38	1.55	3518.34	3510	17	21.4		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.04	131	685	1.05	167.57	165	6	1.21E-02	66.3	2.38E+00	
1	89.88	230	527	1.09	179.20	177	16	2.13E-02	32.1	2.60E+00	
1	93.19	179	573	1.01	185.80	177	16	1.66E-02	50.0	2.72E+00	T
0	186.16	520	862	1.33	370.94	366	11	4.81E-02	23.9	3.21E+00	
0	328.07	107	319	1.47	653.64	650	9	9.86E-03	63.7	2.20E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.981E+00	4.253E-01	1.911E-01	1.230E-02	15.600
CS-137	7.607E-02	3.189E-02	2.390E-02	2.719E-03	3.183
TL-208	2.963E-01	4.809E-02	2.526E-02	2.630E-03	11.732
BI-212	6.368E-01	1.785E-01	1.882E-01	2.058E-02	3.383
PB-212	8.516E-01	7.948E-02	4.004E-02	3.059E-03	21.270
BI-214	9.197E-01	1.232E-01	4.451E-02	4.740E-03	20.663
PB-214	9.349E-01	9.999E-02	5.011E-02	3.842E-03	18.658
RA-223	2.881E-01	1.192E-01	1.217E-01	1.082E-02	2.368
AC-228	9.809E-01	1.478E-01	8.453E-02	7.346E-03	11.604
NP-237	4.164E-01	1.493E-01	1.970E-01	2.475E-02	2.114
AM-243	1.664E-01	4.719E-02	4.421E-02	8.813E-03	3.764

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-4.592E-03		1.247E-02	2.183E-02	1.206E-03	-0.210
RH-101	6.108E-03		1.553E-02	2.537E-02	3.960E-03	0.241
SB-125	1.711E-02		3.714E-02	6.439E-02	5.279E-03	0.266
EU-155	-1.825E-02		5.264E-02	8.690E-02	8.136E-03	-0.210
PO-209	-3.089E+00		2.795E+00	4.328E+00	8.298E-01	-0.714
BI-211	-4.249E-01		4.051E-01	6.490E-01	6.353E-02	-0.655
PA-233	1.215E-02		2.563E-02	4.475E-02	3.604E-03	0.271
PA-234M	5.906E-01		1.591E+00	2.854E+00	2.228E-01	0.207
TH-234	5.918E-01	+	3.019E-01	5.183E-01	5.184E-02	1.142
U-235	-5.290E-02		9.717E-02	1.560E-01	1.139E-02	-0.339
NP-236	1.888E-02		3.513E-02	5.347E-02	5.315E-03	0.353
NP-239	8.578E-03		9.370E-02	1.626E-01	2.195E-02	0.053
AM-241	3.054E-02		7.807E-02	1.347E-01	8.833E-03	0.227
CM-243	2.227E-03		4.724E-02	7.902E-02	8.543E-03	0.028
AM-246	-1.096E-03		4.874E-02	8.390E-02	1.073E-02	-0.013
CF-249	5.978E-03		1.647E-02	2.842E-02	2.723E-03	0.210

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-NOV-2007 20:08:11

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792203_GAMMA3_400MLSAN_16991.CNF

---- Sample Information ----

Sample ID	: OH207-7922-03
Sample Title	: SB-CZ-SS-2157-SD
Sample Quantity	: 5.55100E+02 GDRY
Sample Type	: SOIL
Sample Geometry	: 400 ml sand
Sample Seq No.	: 16991

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 17:07:51.
Decay time	: 41 17:07:51.57	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.23

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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_LNGBKG100507_GAMMA3__16287.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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.34*	236	846	1.36	140.70	136	10	50.1		TH-234
1	74.88*	963	1032	1.44	166.29	159	23	14.8	2.66E+00	AM-243
										PB-214
										PB-212
1	77.14*	1488	908	1.36	171.29	159	23	9.4		PB-214
										PB-212
1	87.30	506	860	1.34	193.82	182	31	22.9	3.75E+00	NP-237
										PB-214
										PB-212
1	90.02	419	937	1.43	199.85	182	31	30.0		
1	92.85*	498	918	1.48	206.13	182	31	26.6		TH-234
0	128.93	222	833	1.62	286.09	282	10	50.6		AC-228
0	186.20*	485	813	1.63	413.04	407	13	26.6		
0	209.50	258	646	1.46	464.69	460	11	40.2		AC-228
2	238.74*	2688	478	1.50	529.49	521	27	5.0	9.63E-01	PB-212
2	241.67	535	527	1.85	535.98	521	27	24.0		PB-214
0	269.90	248	461	1.27	598.55	592	12	36.9		RA-223
										AC-228
0	277.27	144	381	1.83	614.89	611	11	54.9		TL-208
0	295.30	826	319	1.51	654.87	649	12	11.1		PB-214
0	300.15	225	354	1.92	665.61	661	12	36.0		PB-212
0	328.03	156	278	1.84	727.40	723	10	43.1		
0	338.30*	526	394	1.38	750.17	745	12	17.4		AC-228
0	352.16*	1254	380	1.65	780.89	774	16	9.0		PB-214
0	463.32	142	217	1.86	1027.28	1020	14	47.2		AC-228
0	510.81*	256	309	1.93	1132.53	1125	19	37.2		TL-208
0	583.28*	775	265	1.72	1293.15	1283	17	12.0		TL-208
0	609.31*	892	181	1.58	1350.84	1345	16	9.5		BI-214
0	661.64	150	136	1.25	1466.81	1460	13	36.0		CS-137
0	727.29	232	131	1.45	1612.32	1604	17	26.2		BI-212
0	768.42	51	113	1.54	1703.47	1699	9	80.5		BI-214
0	795.67	104	111	1.86	1763.87	1756	15	49.1		AC-228
0	860.18	123	81	2.00	1906.84	1898	17	38.0		TL-208
0	911.20*	547	61	1.87	2019.91	2011	16	10.8		AC-228
1	964.99	133	53	2.22	2139.13	2130	26	31.7	1.18E+00	AC-228
1	969.10	351	46	1.95	2148.23	2130	26	13.5		AC-228
0	1120.74*	162	105	1.72	2484.29	2475	20	34.9		BI-214
0	1460.96*	604	49	2.31	3238.22	3229	18	10.0		K-40
0	1764.71*	141	26	2.54	3911.30	3903	23	24.9		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	90.02	419	937	1.43	199.85	182	31	3.88E-02	30.0	3.55E+00	
0	186.20	485	813	1.63	413.04	407	13	4.49E-02	26.6	2.81E+00	
0	328.03	156	278	1.84	727.40	723	10	1.44E-02	43.1	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.574E+00	5.303E-01	2.615E-01	1.539E-02	17.493
CS-137	7.593E-02	2.786E-02	3.433E-02	2.471E-03	2.212
TL-208	3.535E-01	5.098E-02	2.898E-02	2.306E-03	12.198
BI-212	9.143E-01	2.485E-01	2.193E-01	1.592E-02	4.169
PB-212	1.165E+00	1.049E-01	4.660E-02	3.483E-03	24.998
BI-214	7.743E-01	9.444E-02	5.189E-02	3.954E-03	14.922
PB-214	8.394E-01	1.011E-01	5.689E-02	4.526E-03	14.753
RA-223	3.702E-01	1.406E-01	1.510E-01	1.337E-02	2.451
AC-228	1.190E+00	1.530E-01	9.114E-02	6.408E-03	13.057
TH-234	1.168E+00	3.276E-01	3.203E-01	2.868E-02	3.647
NP-237	5.186E-01	1.322E-01	1.392E-01	1.551E-02	3.726
AM-243	1.822E-01	4.421E-02	2.795E-02	5.374E-03	6.519

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.132E-02		1.596E-02	2.818E-02	1.495E-03	0.402
RH-101	8.024E-04		1.706E-02	2.873E-02	4.435E-03	0.028
SB-125	1.402E-02		4.366E-02	7.671E-02	6.341E-03	0.183
EU-155	6.147E-02		5.024E-02	8.799E-02	8.274E-03	0.699
PO-209	2.007E+00		3.228E+00	5.899E+00	1.087E+00	0.340
BI-211	-4.400E-01		4.996E-01	7.970E-01	5.740E-02	-0.552
PA-233	1.740E-02		3.151E-02	5.369E-02	4.382E-03	0.324
PA-234M	3.030E+00		1.977E+00	3.782E+00	2.583E-01	0.801
U-235	8.265E-02		1.068E-01	1.844E-01	1.369E-02	0.448
NP-236	2.949E-02		3.228E-02	4.710E-02	4.495E-03	0.626
NP-239	7.827E-02		1.146E-01	1.957E-01	2.617E-02	0.400
AM-241	3.706E-02		3.300E-02	4.961E-02	3.139E-03	0.747
CM-243	2.103E-03		4.527E-02	7.785E-02	8.389E-03	0.027
AM-246	3.036E-02		5.852E-02	1.065E-01	1.344E-02	0.285
CF-249	4.640E-03		1.910E-02	3.347E-02	3.334E-03	0.139

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 00:04:18

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792204_GAMMA2_400MLSAN_16994.CNF

---- Sample Information ----

Sample ID	: OH207-7922-04		
Sample Title	: SB-CZ-SS-2158-SD		
Sample Quantity	: 4.80000E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16994		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 4-NOV-2007 21:04:02.
Decay time	: 41 21:04:02.47	% 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.73	510	777	1.19	149.05	143	16	20.4	2.15E+00	AM-243
										PB-214
										PB-212
2	77.07	789	675	0.96	153.70	143	16	12.7		PB-214
										PB-212
4	87.22*	358	647	1.24	173.91	165	27	26.2	2.38E+00	NP-237
										PB-214
										PB-212
4	89.98*	262	619	1.25	179.41	165	27	34.2		
4	92.81*	420	676	1.39	185.05	165	27	25.0		
0	129.58	132	716	1.32	258.26	254	8	72.4		AC-228
0	185.80*	426	871	1.40	370.22	364	12	29.8		
0	209.31	197	531	0.94	417.04	413	8	43.0		AC-228
1	236.52	124	324	1.34	471.24	468	21	48.1	4.17E+00	
1	238.79*	2350	358	1.11	475.76	468	21	5.0		PB-212
1	241.04	189	333	1.10	480.24	468	21	46.4		
1	241.96	372	329	1.18	482.07	468	21	21.0		PB-214
3	270.18*	223	262	1.51	538.30	535	9	28.3	1.56E+00	RA-223
										AC-228
3	271.45	44	228	1.28	540.82	535	9	125.2		
0	295.40*	685	370	1.24	588.55	584	10	13.1		PB-214
0	300.41	135	306	1.02	598.53	595	8	48.2		PB-212
0	328.22	139	286	1.52	653.92	650	9	46.9		
0	338.65*	488	386	1.40	674.72	670	13	18.9		AC-228
0	352.10*	1188	294	1.36	701.51	696	11	8.1		PB-214
0	409.93	124	250	1.98	816.75	811	12	54.1		AC-228
0	463.12	154	177	0.93	922.78	917	10	36.2		AC-228
0	511.00*	306	253	1.73	1018.21	1011	16	27.7		TL-208
0	583.50*	708	193	1.44	1162.77	1157	14	11.5		TL-208
0	609.44*	927	179	1.45	1214.51	1207	14	9.1		BI-214
0	661.78	393	263	1.42	1318.88	1312	15	20.6		CS-137
0	727.78	193	137	2.02	1450.55	1444	18	32.0		BI-212
0	768.47	102	104	2.15	1531.73	1525	11	43.7		BI-214
0	785.42	55	80	2.14	1565.55	1561	10	66.6		BI-212
0	794.89	124	90	2.23	1584.45	1576	15	37.9		AC-228
0	835.83	34	106	1.31	1666.14	1660	12	124.0		
0	860.67*	94	106	1.34	1715.70	1709	15	52.5		TL-208
0	911.10*	554	74	1.58	1816.37	1809	15	11.0		AC-228
1	964.68	105	65	1.93	1923.33	1917	23	37.3	1.63E+00	AC-228
1	968.86*	341	57	1.83	1931.67	1917	23	14.1		AC-228
0	1119.93*	241	56	1.54	2233.34	2225	17	19.3		BI-214
0	1377.37	26	48	1.38	2747.77	2740	12	112.8		BI-214
0	1407.02	25	25	1.38	2807.03	2801	10	84.2		BI-214
0	1459.80*	562	35	2.16	2912.56	2906	19	10.1		K-40
0	1620.32	22	28	2.94	3233.59	3225	14	109.3		BI-212
5	1727.08	33	10	2.14	3447.20	3443	11	53.1	1.35E+00	
5	1728.88	13	5	1.25	3450.82	3443	11	115.1		BI-214
0	1762.72*	184	10	2.35	3518.53	3508	19	17.4		BI-214
0	1845.16	38	11	1.04	3683.54	3678	14	48.9		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	89.98	262	619	1.25	179.41	165	27	2.43E-02	34.2	2.61E+00	
4	92.81	420	676	1.39	185.05	165	27	3.89E-02	25.0	2.71E+00	T
0	185.80	426	871	1.40	370.22	364	12	3.94E-02	29.8	3.21E+00	
1	236.52	124	324	1.34	471.24	468	21	1.15E-02	48.1	2.82E+00	
1	241.04	189	333	1.10	480.24	468	21	1.75E-02	46.4	2.78E+00	
3	271.45	44	228	1.28	540.82	535	9	4.12E-03	****	2.56E+00	
0	328.22	139	286	1.52	653.92	650	9	1.29E-02	46.9	2.20E+00	
0	835.83	34	106	1.31	1666.14	1660	12	3.19E-03	****	1.01E+00	
5	1727.08	33	10	2.14	3447.20	3443	11	3.02E-03	53.1	5.94E-01	
0	1845.16	38	11	1.04	3683.54	3678	14	3.50E-03	48.9	5.62E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.072E+00	4.881E-01	2.501E-01	1.610E-02	16.284
CS-137	1.984E-01	4.672E-02	2.837E-02	3.228E-03	6.994
TL-208	3.238E-01	5.024E-02	2.653E-02	2.762E-03	12.206
BI-212	7.574E-01	2.561E-01	1.884E-01	2.060E-02	4.019
PB-212	1.010E+00	9.232E-02	4.222E-02	3.226E-03	23.926
BI-214	8.063E-01	1.128E-01	4.816E-02	5.128E-03	16.743
PB-214	7.942E-01	8.886E-02	5.158E-02	3.955E-03	15.397
RA-223	3.307E-01	9.795E-02	1.325E-01	1.178E-02	2.496
AC-228	1.178E+00	1.651E-01	8.847E-02	7.687E-03	13.317
NP-237	6.077E-01	1.764E-01	1.993E-01	2.504E-02	3.049
AM-243	2.002E-01	5.716E-02	4.808E-02	9.584E-03	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	8.748E-03		1.379E-02	2.046E-02	1.190E-03	0.428
RH-101	5.181E-03		1.589E-02	2.595E-02	4.052E-03	0.200
SB-125	3.056E-02		4.372E-02	7.615E-02	6.243E-03	0.401
EU-155	2.750E-02		5.896E-02	9.949E-02	9.316E-03	0.276
PO-209	1.007E+00		2.772E+00	4.969E+00	9.527E-01	0.203
BI-211	1.504E-01		4.361E-01	6.870E-01	6.725E-02	0.219
PA-233	2.441E-03		2.763E-02	4.757E-02	3.832E-03	0.051
PA-234M	1.900E+00		1.692E+00	3.201E+00	2.499E-01	0.593
TH-234	1.501E+00	+	4.049E-01	5.559E-01	5.561E-02	2.700
U-235	7.820E-02		1.050E-01	1.749E-01	1.277E-02	0.447
NP-236	5.588E-02		3.642E-02	5.706E-02	5.672E-03	0.979
NP-239	1.030E-02		9.870E-02	1.715E-01	2.315E-02	0.060
AM-241	1.613E-02		8.370E-02	1.437E-01	9.424E-03	0.112
CM-243	5.962E-02		5.293E-02	9.056E-02	9.790E-03	0.658
AM-246	2.849E-03		4.724E-02	8.257E-02	1.056E-02	0.035
CF-249	7.599E-03		1.795E-02	3.105E-02	2.975E-03	0.245

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 03:15:56

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792205_GAMMA1_400MLSAN_16995.CNF

---- Sample Information ----

Sample ID : OH207-7922-05
Sample Title : SB-CZ-SS-2159-SD
Sample Quantity : 5.16800E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 16995

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 5-NOV-2007 00:15:40.
Decay time : 42 00:15:40.06 % 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:

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

where:
$x = \ln(a1/energy)$

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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.98	432	579	1.10	149.37	142	19	20.9	2.12E+00	AM-243
										PB-214
										PB-212
3	77.24*	679	477	0.99	153.90	142	19	13.1		PB-214
										PB-212
0	87.31	229	687	1.00	174.07	171	7	40.1		NP-237
										PB-214
										PB-212
5	92.88*	287	586	1.20	185.21	182	12	31.5	1.32E+00	
5	95.20	113	665	1.56	189.85	182	12	92.5		
0	129.15	133	674	0.91	257.85	254	8	69.7		AC-228
0	185.89*	330	734	1.26	371.46	367	10	33.3		
0	209.46	195	532	1.01	418.66	415	9	45.4		AC-228
1	238.65*	2001	335	1.13	477.11	470	21	5.5	3.00E+00	PB-212
1	241.14	240	310	1.12	482.08	470	21	33.1		
1	242.03	350	263	1.05	483.88	470	21	20.3		PB-214
1	269.18	115	293	1.32	538.24	533	15	57.9	2.05E+00	RA-223
1	270.44	152	257	1.24	540.76	533	15	41.4		AC-228
1	271.68	49	295	1.32	543.24	533	15	137.6		
0	295.24	778	370	1.24	590.42	586	11	12.0		PB-214
0	300.21	105	276	1.01	600.36	597	8	58.2		PB-212
0	327.73	135	290	1.12	655.46	651	10	50.1		
0	338.40*	514	354	1.14	676.83	670	14	17.9		AC-228
0	351.84*	1400	309	1.29	703.74	697	13	7.5		PB-214
0	408.88	75	203	1.54	817.96	814	10	75.1		AC-228
0	462.49	132	196	1.38	925.29	920	12	45.7		AC-228
0	510.65*	321	288	2.08	1021.71	1013	19	29.4		TL-208
0	583.09*	611	218	1.37	1166.75	1159	16	13.6		TL-208
0	609.06*	984	253	1.38	1218.74	1211	16	9.7		BI-214
0	661.35	151	199	1.43	1323.43	1318	14	42.8		CS-137
0	727.03	174	128	1.36	1454.94	1447	16	32.7		BI-212
0	835.03	43	75	1.32	1671.14	1668	9	77.1		
0	861.03	100	82	1.80	1723.20	1716	14	44.2		TL-208
0	911.00*	477	84	1.47	1823.22	1815	15	12.5		AC-228
0	933.58	66	55	2.02	1868.43	1862	11	49.8		BI-214
2	964.09	78	62	2.06	1929.51	1923	23	45.3	1.11E+00	AC-228
2	968.66*	303	47	1.83	1938.65	1923	23	14.7		AC-228
0	1119.67	241	95	1.98	2240.96	2233	19	22.9		BI-214
0	1238.10	84	75	1.91	2478.01	2471	15	50.0		BI-214
0	1377.67	64	46	1.34	2757.39	2749	12	49.2		BI-214
0	1460.15*	503	25	2.07	2922.46	2914	18	10.3		K-40
0	1590.05	82	68	6.60	3182.45	3166	31	63.9		AC-228
0	1729.88	42	24	1.94	3462.31	3453	20	66.6		BI-214
0	1763.71*	174	30	1.84	3530.02	3522	18	22.3		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	92.88	287	586	1.20	185.21	182	12	2.65E-02	31.5	2.43E+00	T
5	95.20	113	665	1.56	189.85	182	12	1.04E-02	92.5	2.50E+00	
0	185.89	330	734	1.26	371.46	367	10	3.06E-02	33.3	3.03E+00	
1	241.14	240	310	1.12	482.08	470	21	2.22E-02	33.1	2.64E+00	
1	271.68	49	295	1.32	543.24	533	15	4.52E-03	****	2.43E+00	
0	327.73	135	290	1.12	655.46	651	10	1.25E-02	50.1	2.11E+00	
0	835.03	43	75	1.32	1671.14	1668	9	4.02E-03	77.1	1.03E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.229E+00	3.983E-01	1.917E-01	1.309E-02	16.840
CS-137	7.083E-02	3.122E-02	2.433E-02	2.615E-03	2.911
TL-208	2.628E-01	4.449E-02	2.346E-02	2.354E-03	11.205
BI-212	6.313E-01	2.153E-01	1.564E-01	1.505E-02	4.036
PB-212	8.419E-01	7.957E-02	3.807E-02	2.938E-03	22.116
BI-214	8.020E-01	1.128E-01	4.581E-02	4.666E-03	17.508
PB-214	9.057E-01	9.844E-02	4.663E-02	3.680E-03	19.422
RA-223	1.667E-01	9.776E-02	1.215E-01	1.118E-02	1.372
AC-228	9.203E-01	1.259E-01	8.043E-02	4.445E-03	11.442
NP-237	4.080E-01	1.739E-01	2.151E-01	3.111E-02	1.897
AM-243	1.836E-01	5.444E-02	4.499E-02	9.439E-03	4.081

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	6.594E-03		1.309E-02	2.138E-02	1.395E-03	0.308
RH-101	2.521E-03		1.486E-02	2.469E-02	3.830E-03	0.102
SB-125	1.500E-02		3.780E-02	6.592E-02	5.406E-03	0.228
EU-155	2.228E-02		5.483E-02	9.376E-02	9.309E-03	0.238
PO-209	-3.210E-02		2.441E+00	4.294E+00	7.685E-01	-0.007
BI-211	1.886E-01		4.072E-01	6.522E-01	4.751E-02	0.289
PA-233	-2.057E-03		2.477E-02	4.285E-02	3.599E-03	-0.048
PA-234M	7.228E-01		1.582E+00	2.848E+00	1.637E-01	0.254
TH-234	1.061E+00	+	3.560E-01	5.225E-01	6.096E-02	2.031
U-235	5.063E-03		9.406E-02	1.563E-01	1.091E-02	0.032
NP-236	2.882E-02		3.219E-02	5.068E-02	5.568E-03	0.569
NP-239	-3.609E-03		9.566E-02	1.558E-01	2.102E-02	-0.023
AM-241	1.235E-02		8.376E-02	1.461E-01	1.161E-02	0.085
CM-243	1.897E-02		4.951E-02	8.470E-02	9.653E-03	0.224
AM-246	1.996E-02		4.292E-02	7.797E-02	9.596E-03	0.256
CF-249	1.593E-02		1.649E-02	2.941E-02	2.837E-03	0.542

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 03:16:58

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792206_GAMMA2_400MLSAN_16996.CNF

---- Sample Information ----

Sample ID	: OH207-7922-06		
Sample Title	: SB-CZ-SS-2160-SD		
Sample Quantity	: 5.09600E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16996		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 00:16:38.
Decay time	: 42 00:16:38.89	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.81

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.25*	138	826	1.24	126.20	123	8	75.1		TH-234
2	74.80	549	824	1.04	149.19	144	14	18.7	1.59E+00	AM-243
										PB-214
										PB-212
2	77.05	792	830	0.95	153.67	144	14	13.6		PB-214
										PB-212
1	87.16*	306	864	0.99	173.80	169	14	32.2	4.44E+00	NP-237
										PB-214
										PB-212
1	89.82*	195	776	1.08	179.10	169	14	47.9		
0	92.85*	456	860	1.54	185.12	182	8	24.8		TH-234
0	129.40	224	1031	1.35	257.89	253	10	55.3		AC-228
0	185.96*	433	870	1.12	370.54	366	10	27.7		
0	209.40	373	723	1.38	417.23	412	11	29.9		AC-228
1	238.79*	2568	544	1.10	475.76	471	22	5.0	1.98E+00	PB-212
1	241.04	233	513	1.34	480.24	471	22	53.2		
1	242.00	406	427	1.23	482.16	471	22	21.5		PB-214
0	270.15*	261	585	1.23	538.24	532	12	39.3		RA-223
										AC-228
0	295.36*	723	422	1.15	588.45	583	10	13.1		PB-214
0	300.51	170	393	1.12	598.72	595	9	44.8		PB-212
0	328.11	111	373	1.25	653.71	649	9	65.4		
0	338.55*	535	393	1.25	674.51	670	10	16.4		AC-228
0	352.11*	1267	372	1.34	701.52	695	11	8.2		PB-214
0	409.43	72	202	0.97	815.75	812	8	72.5		AC-228
0	462.98	232	213	1.86	922.49	916	14	29.8		AC-228
0	510.88*	310	262	1.75	1017.99	1010	15	27.2		TL-208
0	583.45*	822	255	1.55	1162.67	1156	16	11.3		TL-208
0	609.40*	1052	195	1.40	1214.43	1207	15	8.5		BI-214
0	727.39	181	137	1.70	1449.77	1442	13	30.5		BI-212
0	768.18	123	80	1.14	1531.15	1526	10	33.0		BI-214
0	795.23	96	120	1.40	1585.13	1578	13	51.5		AC-228
0	860.35*	125	69	1.76	1715.07	1708	12	32.5		TL-208
0	911.14*	569	84	1.69	1816.44	1810	13	10.8		AC-228
0	934.69	73	85	1.40	1863.45	1857	14	58.4		BI-214
2	964.25	88	80	2.12	1922.47	1914	28	47.6	1.97E+00	AC-228
2	968.84*	347	58	1.91	1931.62	1914	28	13.8		AC-228
0	1120.22*	165	129	1.62	2233.93	2227	17	35.2		BI-214
0	1237.55	82	73	1.00	2468.33	2462	13	49.5		BI-214
0	1376.72	51	49	1.16	2746.47	2739	14	64.7		BI-214
0	1459.72*	891	54	2.12	2912.40	2902	19	7.8		K-40
0	1590.69*	69	91	4.56	3174.33	3159	31	88.7		
0	1619.47	55	0	1.47	3231.89	3224	16	27.0		BI-212
0	1629.19	53	8	2.57	3251.35	3243	16	36.4		
0	1728.36	32	30	1.54	3449.77	3441	15	83.6		BI-214
0	1762.46*	207	18	1.87	3518.01	3508	17	17.1		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	89.82	195	776	1.08	179.10	169	14	1.80E-02	47.9	2.60E+00	
0	185.96	433	870	1.12	370.54	366	10	4.01E-02	27.7	3.21E+00	
1	241.04	233	513	1.34	480.24	471	22	2.16E-02	53.2	2.78E+00	
0	328.11	111	373	1.25	653.71	649	9	1.03E-02	65.4	2.20E+00	
0	1590.69	69	91	4.56	3174.33	3159	31	6.43E-03	88.7	6.33E-01	
0	1629.19	53	8	2.57	3251.35	3243	16	4.91E-03	36.4	6.21E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.082E+00	6.174E-01	1.992E-01	1.282E-02	30.538
TL-208	3.541E-01	5.441E-02	2.483E-02	2.586E-03	14.261
BI-212	6.678E-01	2.163E-01	1.936E-01	2.117E-02	3.449
PB-212	1.040E+00	9.470E-02	4.266E-02	3.260E-03	24.368
BI-214	8.616E-01	1.176E-01	4.805E-02	5.117E-03	17.931
PB-214	7.978E-01	8.961E-02	5.028E-02	3.855E-03	15.867
RA-223	3.636E-01	1.465E-01	1.313E-01	1.168E-02	2.770
AC-228	1.140E+00	1.581E-01	8.333E-02	7.241E-03	13.681
TH-234	1.533E+00	4.099E-01	4.305E-01	4.306E-02	3.561
NP-237	4.889E-01	1.692E-01	2.252E-01	2.830E-02	2.171
AM-243	2.028E-01	5.544E-02	5.021E-02	1.001E-02	4.039

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	7.159E-03		1.299E-02	2.378E-02	1.384E-03	0.301
RH-101	-1.198E-02		1.642E-02	2.574E-02	4.018E-03	-0.465
SB-125	-1.179E-02		4.007E-02	6.680E-02	5.476E-03	-0.177
CS-137	2.739E-03		1.769E-02	3.106E-02	3.533E-03	0.088
EU-155	8.055E-02		5.887E-02	1.008E-01	9.436E-03	0.799
PO-209	3.268E+00		2.895E+00	5.316E+00	1.019E+00	0.615
BI-211	-6.398E-02		4.459E-01	7.652E-01	7.490E-02	-0.084
PA-233	-6.045E-03		2.714E-02	4.609E-02	3.712E-03	-0.131
PA-234M	1.224E+00		1.673E+00	3.066E+00	2.394E-01	0.399
U-235	3.980E-02		1.029E-01	1.698E-01	1.239E-02	0.234
NP-236	2.290E-02		3.362E-02	5.705E-02	5.671E-03	0.401
NP-239	1.072E-02		9.812E-02	1.703E-01	2.298E-02	0.063
AM-241	3.700E-02		9.052E-02	1.405E-01	9.218E-03	0.263
CM-243	2.269E-03		5.302E-02	8.848E-02	9.565E-03	0.026
AM-246	1.638E-02		5.078E-02	8.972E-02	1.148E-02	0.183
CF-249	7.145E-03		1.716E-02	2.965E-02	2.841E-03	0.241

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 03:17:53

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792207_GAMMA3_400MLSAN_16997.CNF

---- Sample Information ----

Sample ID : OH207-7922-07
Sample Title : SB-CZ-SS-2161-SD
Sample Quantity : 4.60700E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 16997

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 5-NOV-2007 00:17:36.
Decay time : 42 00:17:36.29 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:01.09

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.34*	114	487	1.55	103.02	98	10	78.6		
0	63.27*	233	744	1.34	140.55	135	10	48.2		TH-234
1	74.88*	777	968	1.44	166.29	159	19	17.4	2.77E+00	AM-243
										PB-214
										PB-212
1	77.14*	1267	862	1.38	171.29	159	19	10.5		PB-214
										PB-212
4	87.30	469	723	1.38	193.81	182	32	22.6	1.69E+00	NP-237
										PB-214
										PB-212
4	90.03	342	699	1.31	199.87	182	32	30.9		
4	92.86*	556	825	1.68	206.15	182	32	23.6		TH-234
0	129.08	125	645	0.87	286.43	283	9	74.8		AC-228
0	186.12*	518	694	1.89	412.86	406	14	23.9		
0	209.54	197	534	1.09	464.78	460	11	47.7		AC-228
3	238.72*	1886	463	1.38	529.44	524	18	6.2	2.15E+00	PB-212
3	241.83	501	466	1.85	536.34	524	18	24.1		PB-214
0	270.80	394	473	2.03	600.56	591	21	29.4		RA-223
										AC-228
1	295.33	707	267	1.62	654.93	648	29	11.7	1.74E+00	PB-214
1	300.03	158	275	1.69	665.35	648	29	43.4		PB-212
0	327.97	161	263	1.37	727.27	721	12	43.3		
0	338.79*	409	331	1.87	751.25	746	15	22.1		AC-228
0	351.97*	1070	345	1.47	780.48	771	16	9.9		PB-214
0	463.05	134	136	1.61	1026.67	1022	11	38.3		AC-228
0	511.05*	296	206	2.05	1133.05	1125	20	28.4		TL-208
0	583.17*	701	151	1.47	1292.90	1285	17	11.1		TL-208
0	609.34*	861	143	1.61	1350.90	1343	16	9.3		BI-214
0	727.60	215	148	2.32	1613.00	1602	24	33.1		BI-212
0	794.91	116	80	1.37	1762.18	1755	17	40.1		AC-228
0	860.84	102	94	1.44	1908.31	1900	17	47.8		TL-208
0	911.28*	395	86	1.72	2020.08	2014	14	14.4		AC-228
3	964.54	85	38	2.08	2138.11	2134	22	32.8	1.13E+00	AC-228
3	969.08	239	71	1.99	2148.18	2134	22	19.3		AC-228
0	1120.59*	182	98	1.73	2483.95	2473	18	29.9		BI-214
0	1238.68	94	61	1.85	2745.65	2737	18	44.5		BI-214
0	1407.87	45	7	1.44	3120.58	3114	13	38.2		BI-214
0	1460.93*	436	53	2.23	3238.16	3226	22	12.9		K-40
1	1763.76*	69	30	2.85	3909.21	3900	21	49.6	2.50E+00	BI-214
1	1765.30*	69	19	2.12	3912.61	3900	21	43.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.34	114	487	1.55	103.02	98	10	1.05E-02	78.6	2.76E+00	
4	90.03	342	699	1.31	199.87	182	32	3.17E-02	30.9	3.55E+00	
0	186.12	518	694	1.89	412.86	406	14	4.80E-02	23.9	2.81E+00	
0	327.97	161	263	1.37	727.27	721	12	1.49E-02	43.3	1.90E+00	
1	1765.30	69	19	2.12	3912.61	3900	21	6.42E-03	43.6	4.90E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.979E+00	5.655E-01	3.084E-01	1.815E-02	12.901
TL-208	3.849E-01	5.261E-02	2.964E-02	2.359E-03	12.987
BI-212	1.019E+00	3.456E-01	2.317E-01	1.682E-02	4.399
PB-212	9.845E-01	9.592E-02	5.176E-02	3.869E-03	19.019
BI-214	8.998E-01	1.083E-01	5.818E-02	4.433E-03	15.464
PB-214	8.628E-01	1.096E-01	6.366E-02	5.065E-03	13.553
RA-223	7.082E-01	2.175E-01	1.659E-01	1.469E-02	4.268
AC-228	1.036E+00	1.657E-01	1.090E-01	7.661E-03	9.506
TH-234	1.572E+00	3.972E-01	3.612E-01	3.234E-02	4.352
NP-237	5.790E-01	1.460E-01	1.570E-01	1.749E-02	3.689
AM-243	1.772E-01	4.594E-02	3.207E-02	6.168E-03	5.524

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.555E-02		1.804E-02	3.017E-02	1.600E-03	0.515
RH-101	-1.094E-02		1.894E-02	3.125E-02	4.824E-03	-0.350
SB-125	1.642E-03		4.814E-02	8.390E-02	6.935E-03	0.020
CS-137	4.067E-03		2.032E-02	3.526E-02	2.538E-03	0.115
EU-155	7.644E-03		5.466E-02	9.436E-02	8.873E-03	0.081
PO-209	-2.099E+00		3.431E+00	5.794E+00	1.068E+00	-0.362
BI-211	-3.382E-02		5.779E-01	9.797E-01	7.056E-02	-0.035
PA-233	-1.036E-02		3.448E-02	5.701E-02	4.653E-03	-0.182
PA-234M	1.274E+00		2.176E+00	3.982E+00	2.719E-01	0.320
U-235	1.905E-02		1.150E-01	1.968E-01	1.460E-02	0.097
NP-236	2.701E-02		3.536E-02	5.162E-02	4.926E-03	0.523
NP-239	7.875E-02		1.230E-01	2.109E-01	2.821E-02	0.373
AM-241	2.251E-02		3.890E-02	5.748E-02	3.637E-03	0.392
CM-243	8.438E-03		4.952E-02	8.558E-02	9.222E-03	0.099
AM-246	3.879E-02		5.955E-02	1.113E-01	1.404E-02	0.349
CF-249	-1.237E-02		2.137E-02	3.625E-02	3.611E-03	-0.341

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 13:50:08

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792208_GAMMA1_400MLSAN_16998.CNF

---- Sample Information ----

Sample ID	: OH207-7922-08		
Sample Title	: SB-CZ-SS-2162-SD		
Sample Quantity	: 4.78500E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16998		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 10:49:37.
Decay time	: 42 10:49:37.93	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:02.68

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.97	441	660	1.11	149.36	144	15	21.8	5.58E-01	AM-243
										PB-214
										PB-212
2	77.23*	702	587	0.94	153.87	144	15	13.5		PB-214
										PB-212
5	84.17*	164	380	1.52	167.78	165	13	39.7	6.16E-01	
5	87.29	269	587	1.13	174.02	165	13	31.8		NP-237
										PB-214
										PB-212
4	90.12	166	451	0.87	179.69	177	13	40.7	1.15E+00	
4	93.02*	322	681	1.30	185.49	177	13	31.3		
2	128.64	126	378	1.14	256.82	254	8	49.4	2.99E+00	AC-228
2	129.52	71	440	1.04	258.59	254	8	100.3		
0	185.64*	410	722	1.23	370.95	365	12	28.5		
0	209.07	175	469	1.01	417.87	414	8	45.5		AC-228
4	238.65*	2053	357	1.03	477.10	472	18	5.3	1.74E+00	PB-212
4	241.62	495	472	1.71	483.05	472	18	22.3		PB-214
1	269.56	69	273	1.20	539.00	535	14	88.8	6.66E+00	RA-223
1	270.52	124	335	1.26	540.91	535	14	55.1		AC-228
0	277.59	86	214	1.09	555.07	552	7	60.5		TL-208
0	295.11	701	391	1.14	590.16	583	12	13.6		PB-214
0	299.99	130	242	1.00	599.94	596	8	45.2		PB-212
0	328.26	131	267	1.00	656.52	652	10	50.0		
0	338.30*	451	265	1.31	676.63	672	10	16.6		AC-228
0	351.87*	1239	346	1.17	703.80	698	13	8.4		PB-214
0	409.60	95	147	0.99	819.39	815	9	50.6		AC-228
0	462.81	146	176	1.73	925.94	921	11	39.3		AC-228
0	510.55*	269	257	1.53	1021.51	1015	16	31.4		TL-208
0	583.02*	661	159	1.47	1166.62	1161	11	10.8		TL-208
0	609.16*	860	142	1.69	1218.95	1214	11	8.8		BI-214
0	661.42	150	127	1.16	1323.57	1318	11	33.3		CS-137
0	727.31	131	126	1.48	1455.49	1449	13	39.6		BI-212
0	768.22	74	94	1.84	1537.40	1531	10	54.8		BI-214
0	795.19	84	79	1.55	1591.39	1586	12	47.9		AC-228
0	859.89	91	69	1.25	1720.91	1715	11	41.0		TL-208
0	910.91*	492	87	1.56	1823.04	1816	14	12.2		AC-228
0	933.75	84	58	1.64	1868.77	1863	15	44.7		BI-214
2	964.08	98	63	2.06	1929.49	1924	21	36.4	2.39E+00	AC-228
2	968.61*	278	53	1.43	1938.55	1924	21	15.4		AC-228
0	1120.15	180	74	1.85	2241.90	2234	14	25.1		BI-214
0	1377.30	73	24	1.42	2756.64	2749	14	37.2		BI-214
0	1407.73	46	22	1.86	2817.55	2812	14	51.6		BI-214
0	1460.23*	615	13	2.24	2922.62	2916	16	8.7		K-40
0	1589.51	70	39	5.15	3181.39	3172	20	50.1		AC-228
0	1620.85	26	36	2.45	3244.11	3235	16	111.6		BI-212
0	1730.34	40	26	2.03	3463.24	3453	17	70.0		BI-214
0	1763.63*	153	21	1.85	3529.87	3520	16	21.2		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	84.17	164	380	1.52	167.78	165	13	1.52E-02	39.7	2.10E+00	
4	90.12	166	451	0.87	179.69	177	13	1.54E-02	40.7	2.33E+00	
4	93.02	322	681	1.30	185.49	177	13	2.98E-02	31.3	2.43E+00	T
2	129.52	71	440	1.04	258.59	254	8	6.62E-03	****	3.12E+00	
0	185.64	410	722	1.23	370.95	365	12	3.79E-02	28.5	3.03E+00	
0	328.26	131	267	1.00	656.52	652	10	1.21E-02	50.0	2.10E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.261E+00	4.703E-01	2.097E-01	1.432E-02	20.317
CS-137	7.637E-02	2.669E-02	3.063E-02	3.292E-03	2.493
TL-208	3.071E-01	4.537E-02	2.565E-02	2.574E-03	11.973
BI-212	5.113E-01	2.081E-01	1.909E-01	1.836E-02	2.678
PB-212	9.331E-01	8.736E-02	4.189E-02	3.233E-03	22.275
BI-214	7.570E-01	1.018E-01	4.641E-02	4.727E-03	16.312
PB-214	8.657E-01	1.001E-01	4.757E-02	3.754E-03	18.198
RA-223	1.071E-01	9.568E-02	1.275E-01	1.173E-02	0.840
AC-228	1.025E+00	1.376E-01	9.084E-02	5.020E-03	11.287
NP-237	5.180E-01	1.810E-01	2.056E-01	2.974E-02	2.519
AM-243	2.027E-01	6.134E-02	5.066E-02	1.063E-02	4.001

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	9.886E-03		1.413E-02	1.945E-02	1.269E-03	0.508
RH-101	2.738E-03		1.559E-02	2.595E-02	4.024E-03	0.106
SB-125	-4.192E-03		3.809E-02	6.497E-02	5.328E-03	-0.065
EU-155	5.019E-02		5.445E-02	9.458E-02	9.390E-03	0.531
PO-209	-2.588E+00		2.747E+00	4.388E+00	7.853E-01	-0.590
BI-211	-1.047E-01		4.072E-01	7.021E-01	5.115E-02	-0.149
PA-233	-1.216E-03		2.660E-02	4.609E-02	3.870E-03	-0.026
PA-234M	1.165E+00		1.635E+00	3.011E+00	1.731E-01	0.387
TH-234	1.287E+00	+	4.303E-01	5.709E-01	6.660E-02	2.254
U-235	1.321E-01		9.926E-02	1.708E-01	1.192E-02	0.774
NP-236	2.926E-02		3.283E-02	5.700E-02	6.262E-03	0.513
NP-239	2.088E-02		1.035E-01	1.700E-01	2.293E-02	0.123
AM-241	-6.656E-03		9.229E-02	1.598E-01	1.270E-02	-0.042
CM-243	-4.704E-02		4.980E-02	8.138E-02	9.275E-03	-0.578
AM-246	-3.178E-02		4.630E-02	7.531E-02	9.269E-03	-0.422
CF-249	1.724E-03		1.697E-02	2.931E-02	2.828E-03	0.059

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 13:51:15

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792209_GAMMA2_400MLSAN_16999.CNF

---- Sample Information ----

Sample ID	: OH207-7922-09		
Sample Title	: SB-CZ-SS-2163-SD		
Sample Quantity	: 5.24700E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 16999		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 10:50:55.
Decay time	: 42 10:50:55.15	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.68

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.80	540	677	1.08	149.19	143	16	17.7	2.59E+00	AM-243
										PB-214
										PB-212
1	77.12	869	761	1.09	153.80	143	16	12.7		PB-214
										PB-212
0	87.23*	278	879	1.16	173.94	171	7	37.5		NP-237
										PB-214
										PB-212
6	92.74*	221	727	1.11	184.90	182	9	45.6	7.03E+00	
6	93.35*	124	899	1.76	186.12	182	9	96.4		
0	128.94	82	627	1.22	256.98	254	6	99.5		AC-228
0	186.07*	389	882	1.13	370.76	366	10	30.9		
0	209.41	209	642	1.19	417.24	413	9	45.9		AC-228
2	238.77*	2149	499	1.13	475.72	471	15	5.5	4.81E+00	PB-212
2	241.12	246	487	1.43	480.41	471	15	49.6		
2	242.21	382	357	1.20	482.58	471	15	21.8		PB-214
0	270.61*	176	493	1.12	539.16	534	10	50.0		RA-223
										AC-228
0	295.38*	817	423	1.21	588.50	584	11	12.1		PB-214
0	300.56	204	373	1.12	598.82	594	11	39.2		PB-212
0	328.36	128	356	1.14	654.21	649	10	58.3		
0	338.63*	526	431	1.22	674.67	668	14	19.1		AC-228
0	352.15*	1327	316	1.30	701.61	697	11	7.7		PB-214
0	463.32	152	147	1.42	923.18	919	9	33.2		AC-228
0	511.06*	203	260	1.88	1018.34	1013	14	39.4		TL-208
0	583.20*	694	251	1.33	1162.18	1154	16	12.8		TL-208
0	609.50*	1068	166	1.42	1214.62	1208	13	8.0		BI-214
0	661.61	248	148	1.79	1318.56	1313	12	23.3		CS-137
0	727.67	145	120	1.17	1450.32	1445	12	34.5		BI-212
0	768.30	97	104	1.53	1531.39	1526	10	44.2		BI-214
0	785.55	45	63	1.18	1565.80	1562	8	67.8		BI-212
0	795.07	79	86	1.00	1584.80	1580	11	51.4		AC-228
0	860.58*	100	51	1.78	1715.52	1711	9	33.4		TL-208
0	911.16*	551	86	1.52	1816.49	1809	15	11.3		AC-228
0	934.05	58	43	1.64	1862.18	1856	13	54.8		BI-214
3	964.53	95	35	2.33	1923.03	1917	22	35.8	9.77E-01	AC-228
3	968.80*	316	50	1.97	1931.54	1917	22	14.4		AC-228
0	1119.97*	265	62	1.93	2233.43	2223	21	19.5		BI-214
0	1237.72	68	67	1.41	2468.66	2464	11	53.3		BI-214
0	1376.58	73	34	2.27	2746.18	2737	17	43.4		BI-214
0	1459.69*	682	56	2.15	2912.34	2904	16	9.2		K-40
0	1727.81	55	7	2.46	3448.67	3440	14	33.8		BI-214
0	1762.63*	177	9	2.42	3518.34	3511	16	17.2		BI-214
0	2025.94	16	10	5.39	4045.56	4037	14	98.2		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	92.74	221	727	1.11	184.90	182	9	2.05E-02	45.6	2.70E+00	T
6	93.35	124	899	1.76	186.12	182	9	1.15E-02	96.4	2.72E+00	
0	186.07	389	882	1.13	370.76	366	10	3.60E-02	30.9	3.21E+00	
2	241.12	246	487	1.43	480.41	471	15	2.27E-02	49.6	2.78E+00	
0	328.36	128	356	1.14	654.21	649	10	1.18E-02	58.3	2.20E+00	
0	2025.94	16	10	5.39	4045.56	4037	14	1.49E-03	98.2	5.19E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.524E+00	5.090E-01	1.980E-01	1.275E-02	22.846
CS-137	1.148E-01	2.975E-02	2.698E-02	3.070E-03	4.253
TL-208	2.905E-01	4.795E-02	2.419E-02	2.519E-03	12.010
BI-212	5.194E-01	1.879E-01	1.724E-01	1.885E-02	3.013
PB-212	8.449E-01	7.959E-02	4.025E-02	3.076E-03	20.992
BI-214	8.491E-01	1.129E-01	4.494E-02	4.786E-03	18.893
PB-214	8.110E-01	8.789E-02	4.771E-02	3.659E-03	16.998
RA-223	2.377E-01	1.207E-01	1.268E-01	1.128E-02	1.874
AC-228	1.073E+00	1.533E-01	8.473E-02	7.363E-03	12.658
NP-237	4.313E-01	1.707E-01	2.173E-01	2.730E-02	1.985
AM-243	1.938E-01	5.168E-02	4.630E-02	9.230E-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	5.827E-03		1.392E-02	1.808E-02	1.052E-03	0.322
RH-101	3.466E-03		1.551E-02	2.523E-02	3.938E-03	0.137
SB-125	1.919E-02		3.751E-02	6.509E-02	5.337E-03	0.295
EU-155	3.838E-02		5.394E-02	9.153E-02	8.570E-03	0.419
PO-209	-1.168E+00		2.584E+00	4.329E+00	8.299E-01	-0.270
BI-211	-3.269E-01		4.242E-01	6.963E-01	6.816E-02	-0.469
PA-233	-9.523E-03		2.540E-02	4.290E-02	3.455E-03	-0.222
PA-234M	3.337E-01		1.610E+00	2.848E+00	2.223E-01	0.117
TH-234	7.231E-01	+	3.373E-01	5.185E-01	5.186E-02	1.395
U-235	9.991E-03		9.674E-02	1.584E-01	1.156E-02	0.063
NP-236	9.591E-03		3.180E-02	5.119E-02	5.089E-03	0.187
NP-239	-7.601E-03		9.514E-02	1.642E-01	2.216E-02	-0.046
AM-241	6.092E-02		7.886E-02	1.372E-01	9.000E-03	0.444
CM-243	8.753E-03		4.876E-02	8.178E-02	8.841E-03	0.107
AM-246	-2.559E-02		4.976E-02	8.172E-02	1.045E-02	-0.313
CF-249	1.520E-02		1.671E-02	2.939E-02	2.815E-03	0.517

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 13:52:27

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792210_GAMMA3_400MLSAN_17000.CNF

---- Sample Information ----

Sample ID : OH207-7922-10
Sample Title : SB-CZ-SS-2164-SD
Sample Quantity : 4.41000E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17000

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 5-NOV-2007 10:52:09.
Decay time : 42 10:52:09.06 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:01.03

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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 Mann Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.42*	226	835	1.29	140.88	135	12	55.3		TH-234
1	74.88*	748	867	1.44	166.29	159	23	17.2	2.12E+00	AM-243
										PB-214
										PB-212
1	77.14*	1141	742	1.41	171.29	159	23	11.1		PB-214
										PB-212
2	84.16*	269	825	1.61	186.86	182	34	42.8	3.41E+00	
2	87.21	486	710	1.48	193.61	182	34	22.7		NP-237
										PB-214
										PB-212
2	89.83	360	741	1.62	199.44	182	34	32.9		
2	92.77*	413	627	1.44	205.95	182	34	28.1		TH-234
0	185.94*	394	663	1.44	412.46	407	14	30.3		
0	209.28	164	764	0.88	464.19	456	16	77.2		AC-228
1	238.67*	2018	388	1.45	529.34	520	23	5.9	2.30E+00	PB-212
1	241.52	341	405	1.68	535.66	520	23	31.9		PB-214
0	270.43	208	353	1.78	599.73	594	12	38.8		RA-223
										AC-228
0	295.36	535	349	1.48	655.00	649	13	16.8		PB-214
0	300.18	82	310	1.12	665.67	662	10	83.2		PB-212
0	328.10	89	248	0.67	727.55	723	10	69.6		
0	338.51*	402	206	1.22	750.63	746	9	16.4		AC-228
0	352.05*	855	259	1.50	780.64	773	13	10.4		PB-214
0	463.56	62	199	1.32	1027.80	1023	11	92.2		AC-228
0	511.06*	191	226	1.83	1133.08	1126	15	40.9		TL-208
0	583.19*	628	156	1.44	1292.95	1285	17	12.3		TL-208
0	609.47*	608	188	1.66	1351.18	1342	18	13.5		BI-214
0	726.49	98	155	1.01	1610.55	1605	16	59.8		BI-212
0	795.26	97	87	1.98	1762.96	1757	14	45.6		AC-228
0	860.72	127	64	2.27	1908.03	1899	20	35.9		TL-208
0	911.24*	442	79	1.89	2019.99	2012	19	13.6		AC-228
0	969.53	191	146	1.13	2149.18	2140	15	31.4		AC-228
0	1120.59*	83	77	1.02	2483.95	2480	12	51.1		BI-214
0	1460.78*	561	16	2.25	3237.82	3227	21	9.4		K-40
0	1729.32	36	9	0.93	3832.89	3828	12	47.7		BI-214
0	1764.53*	109	17	1.98	3910.89	3903	20	26.8		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	84.16	269	825	1.61	186.86	182	34	2.49E-02	42.8	3.55E+00	
2	89.83	360	741	1.62	199.44	182	34	3.33E-02	32.9	3.55E+00	
0	185.94	394	663	1.44	412.46	407	14	3.65E-02	30.3	2.81E+00	
0	328.10	89	248	0.67	727.55	723	10	8.23E-03	69.6	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.353E+00	5.928E-01	2.403E-01	1.414E-02	22.277
TL-208	3.605E-01	5.272E-02	3.238E-02	2.577E-03	11.136
BI-212	4.870E-01	2.933E-01	2.409E-01	1.748E-02	2.022
PB-212	1.101E+00	1.050E-01	4.947E-02	3.698E-03	22.248
BI-214	6.643E-01	1.027E-01	5.988E-02	4.563E-03	11.094
PB-214	7.208E-01	9.434E-02	6.067E-02	4.827E-03	11.880
RA-223	3.909E-01	1.554E-01	1.595E-01	1.412E-02	2.450
AC-228	1.211E+00	1.851E-01	1.181E-01	8.300E-03	10.260
TH-234	1.222E+00	3.598E-01	3.660E-01	3.277E-02	3.337
NP-237	6.264E-01	1.582E-01	1.591E-01	1.773E-02	3.938
AM-243	1.781E-01	4.595E-02	3.223E-02	6.198E-03	5.525

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	7.842E-03		1.854E-02	3.057E-02	1.621E-03	0.257
RH-101	7.977E-04		1.865E-02	3.149E-02	4.860E-03	0.025
SB-125	2.667E-02		4.812E-02	8.600E-02	7.110E-03	0.310
CS-137	2.629E-02		2.121E-02	3.880E-02	2.793E-03	0.678
EU-155	6.316E-02		5.524E-02	9.725E-02	9.145E-03	0.649
PO-209	1.537E+00		3.613E+00	6.609E+00	1.218E+00	0.233
BI-211	-4.198E-01		5.632E-01	9.077E-01	6.537E-02	-0.463
PA-233	-4.055E-03		3.386E-02	5.655E-02	4.615E-03	-0.072
PA-234M	-8.886E-02		2.240E+00	3.929E+00	2.683E-01	-0.023
U-235	4.217E-03		1.184E-01	2.020E-01	1.500E-02	0.021
NP-236	4.463E-02		3.456E-02	5.147E-02	4.912E-03	0.867
NP-239	6.538E-02		1.240E-01	2.124E-01	2.841E-02	0.308
AM-241	4.348E-02		3.773E-02	5.714E-02	3.616E-03	0.761
CM-243	2.205E-02		4.951E-02	8.617E-02	9.285E-03	0.256
AM-246	1.667E-02		6.555E-02	1.184E-01	1.495E-02	0.141
CF-249	-1.230E-02		1.929E-02	3.267E-02	3.254E-03	-0.377

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-NOV-2007 13:19:09

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792211_GAMMA1_400MLSAN_17001.CNF

---- Sample Information ----

Sample ID	: OH207-7922-11
Sample Title	: SB-CZ-SS-2165-SD
Sample Quantity	: 5.43800E+02 GDRY
Sample Type	: SOIL
Sample Geometry	: 400 ml sand
Sample Seq No.	: 17001

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 13:53:21.
Decay time	: 42 13:53:21.77	% 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.85	320	513	0.84	149.12	145	16	23.8	1.58E+00	AM-243
										PB-214
										PB-212
1	77.20*	597	590	0.93	153.81	145	16	15.4		PB-214
										PB-212
0	84.05*	156	603	1.00	167.53	165	7	55.1		
0	87.30	217	685	0.82	174.04	171	7	42.0		NP-237
										PB-214
										PB-212
3	89.87	126	518	0.84	179.19	177	13	56.3	2.50E+00	
3	92.85*	293	793	1.28	185.16	177	13	36.6		
0	129.22	144	570	1.02	257.99	255	7	57.6		AC-228
0	185.89*	333	727	1.21	371.45	367	10	33.0		
0	209.20	276	540	1.27	418.13	414	10	33.8		AC-228
1	238.64*	2028	356	1.07	477.07	472	20	5.3	1.35E+00	PB-212
1	241.06	211	347	1.24	481.92	472	20	43.4		
1	241.98	266	335	1.19	483.78	472	20	29.1		PB-214
0	270.29	267	448	1.54	540.46	536	12	34.0		RA-223
										AC-228
0	277.41	170	479	1.10	554.72	548	14	56.8		TL-208
0	295.18	721	379	1.07	590.30	584	11	12.8		PB-214
0	300.34	144	414	1.19	600.62	596	12	59.1		PB-212
0	328.12	152	369	1.09	656.24	651	11	51.8		
0	338.33*	472	312	1.20	676.68	672	11	17.3		AC-228
0	351.85*	1179	272	1.23	703.77	698	12	8.1		PB-214
0	409.28	90	177	1.09	818.75	815	9	56.9		AC-228
0	462.92	143	169	1.50	926.16	922	10	38.1		AC-228
0	510.62*	278	199	1.59	1021.65	1014	15	27.5		TL-208
0	583.10*	698	152	1.50	1166.77	1161	10	10.1		TL-208
0	609.07*	866	188	1.27	1218.77	1212	14	9.7		BI-214
1	661.28	56	85	1.67	1323.30	1319	17	59.3	1.07E+00	CS-137
1	665.04	48	82	1.67	1330.83	1319	17	80.5		
0	727.19	184	127	1.70	1455.25	1447	14	29.8		BI-212
0	768.12	47	135	1.17	1537.19	1532	11	100.6		BI-214
0	794.75	112	78	1.31	1590.51	1585	12	36.7		AC-228
0	860.46	90	93	1.69	1722.04	1714	15	51.5		TL-208
0	910.99*	487	165	1.77	1823.21	1816	17	15.2		AC-228
2	964.41	116	64	1.80	1930.15	1923	24	32.9	1.12E+00	AC-228
2	968.57*	304	64	1.98	1938.47	1923	24	16.1		AC-228
0	1003.00	63	97	4.56	2007.41	1997	24	88.8		
0	1120.04	196	95	1.99	2241.69	2236	17	26.0		BI-214
0	1237.90	84	89	1.92	2477.60	2467	19	58.7		BI-214
0	1378.09	42	46	1.24	2758.23	2751	14	74.3		BI-214
0	1460.23*	734	33	2.19	2922.63	2915	14	8.2		K-40
0	1589.33	69	42	4.33	3181.01	3172	21	52.8		AC-228
0	1630.64	33	12	1.44	3263.71	3256	16	57.9		
0	1763.60*	165	17	2.20	3529.80	3521	17	19.7		BI-214
0	1846.60	53	7	2.23	3695.91	3688	15	35.7		

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	156	603	1.00	167.53	165	7	1.44E-02	55.1	2.10E+00	
3	89.87	126	518	0.84	179.19	177	13	1.16E-02	56.3	2.32E+00	
3	92.85	293	793	1.28	185.16	177	13	2.72E-02	36.6	2.43E+00	T
0	185.89	333	727	1.21	371.45	367	10	3.08E-02	33.0	3.03E+00	
1	241.06	211	347	1.24	481.92	472	20	1.95E-02	43.4	2.64E+00	
0	328.12	152	369	1.09	656.24	651	11	1.40E-02	51.8	2.10E+00	
1	665.04	48	82	1.67	1330.83	1319	17	4.44E-03	80.5	1.21E+00	
0	1003.00	63	97	4.56	2007.41	1997	24	5.79E-03	88.8	9.13E-01	
0	1630.64	33	12	1.44	3263.71	3256	16	3.08E-03	57.9	6.51E-01	
0	1846.60	53	7	2.23	3695.91	3688	15	4.87E-03	35.7	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.478E+00	4.761E-01	1.764E-01	1.204E-02	25.392
CS-137	2.502E-02	1.507E-02	2.173E-02	2.335E-03	1.151
TL-208	2.854E-01	4.070E-02	2.205E-02	2.212E-03	12.945
BI-212	6.330E-01	1.982E-01	1.672E-01	1.608E-02	3.786
PB-212	8.110E-01	7.610E-02	3.697E-02	2.853E-03	21.935
BI-214	6.706E-01	9.412E-02	4.176E-02	4.253E-03	16.061
PB-214	7.254E-01	8.222E-02	4.358E-02	3.439E-03	16.647
RA-223	3.663E-01	1.290E-01	1.183E-01	1.089E-02	3.096
AC-228	8.925E-01	1.447E-01	7.944E-02	4.390E-03	11.235
NP-237	3.678E-01	1.635E-01	1.789E-01	2.587E-02	2.056
AM-243	1.293E-01	4.102E-02	4.598E-02	9.647E-03	2.813

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	7.800E-03		1.315E-02	2.055E-02	1.341E-03	0.380
RH-101	1.637E-02		1.414E-02	2.390E-02	3.707E-03	0.685
SB-125	1.296E-02		3.587E-02	6.245E-02	5.121E-03	0.208
EU-155	3.474E-02		5.074E-02	8.743E-02	8.681E-03	0.397
PO-209	-3.771E-01		2.506E+00	4.340E+00	7.767E-01	-0.087
BI-211	-2.780E-01		3.546E-01	5.868E-01	4.275E-02	-0.474
PA-233	8.459E-03		2.416E-02	4.248E-02	3.567E-03	0.199
PA-234M	8.627E-01		1.557E+00	2.813E+00	1.617E-01	0.307
TH-234	1.032E+00	+	3.961E-01	5.206E-01	6.074E-02	1.983
U-235	1.188E-01		9.251E-02	1.585E-01	1.107E-02	0.749
NP-236	2.023E-02		3.019E-02	5.208E-02	5.721E-03	0.388
NP-239	-4.325E-02		9.278E-02	1.483E-01	2.001E-02	-0.292
AM-241	-2.337E-02		8.189E-02	1.408E-01	1.119E-02	-0.166
CM-243	-1.148E-02		4.605E-02	7.739E-02	8.820E-03	-0.148
AM-246	1.198E-02		4.526E-02	8.016E-02	9.865E-03	0.149
CF-249	8.203E-03		1.521E-02	2.676E-02	2.581E-03	0.307

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 16:55:04

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792212_GAMMA2_400MLSAN_17002.CNF

---- Sample Information ----

Sample ID	: OH207-7922-12		
Sample Title	: SB-CZ-SS-2166-SD		
Sample Quantity	: 4.78700E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17002		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 13:54:47.
Decay time	: 42 13:54:47.73	% 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.81	554	786	1.19	149.20	144	17	19.0	2.93E+00	AM-243
										PB-214
										PB-212
2	77.06	880	641	1.00	153.69	144	17	11.5		PB-214
										PB-212
4	87.21*	298	914	1.13	173.90	169	22	34.3	4.52E+00	NP-237
										PB-214
										PB-212
4	93.31*	236	789	1.29	186.04	169	22	48.3		
0	128.97	182	915	1.32	257.05	252	10	63.9		AC-228
0	185.94*	341	590	1.39	370.49	366	8	27.6		
0	209.27	250	587	1.34	416.97	413	9	37.2		AC-228
2	238.74*	2501	403	1.13	475.67	468	22	4.8	1.76E+00	PB-212
2	241.10	252	418	1.33	480.37	468	22	45.0		
2	242.19	263	358	1.19	482.54	468	22	29.5		PB-214
0	270.50*	354	525	1.27	538.92	532	14	29.6		RA-223
										AC-228
0	276.92	148	449	1.92	551.72	547	11	57.8		TL-208
0	295.38*	559	389	1.33	588.50	583	11	16.2		PB-214
0	300.25	141	310	1.11	598.19	594	9	47.8		PB-212
0	328.40	162	362	1.12	654.30	650	11	48.0		
0	338.47*	595	394	1.29	674.35	668	13	16.1		AC-228
0	352.17*	940	378	1.28	701.65	696	12	10.7		PB-214
0	409.68	82	240	1.14	816.26	812	10	74.5		AC-228
0	463.02	187	168	1.06	922.57	917	11	30.6		AC-228
0	510.93*	268	274	1.81	1018.09	1010	18	33.4		TL-208
0	583.30*	867	162	1.46	1162.37	1154	15	9.4		TL-208
0	609.43*	705	172	1.55	1214.48	1209	12	10.7		BI-214
0	727.27	183	94	1.38	1449.52	1444	12	25.8		BI-212
0	768.69	66	109	0.72	1532.16	1526	11	66.5		BI-214
0	795.12	110	61	1.40	1584.90	1580	10	32.8		AC-228
0	820.75	25	51	1.44	1636.05	1629	9	111.2		
0	840.51	173	147	13.13	1675.47	1661	33	45.4		
0	860.74*	68	82	1.00	1715.84	1711	10	56.5		TL-208
0	911.13*	622	113	1.94	1816.43	1808	19	11.5		AC-228
0	934.28	60	52	1.19	1862.64	1856	13	55.5		BI-214
1	964.45	105	52	1.93	1922.87	1917	25	34.4	1.19E+00	AC-228
1	968.86*	376	43	1.79	1931.67	1917	25	12.5		AC-228
0	1120.29*	175	75	1.90	2234.06	2225	18	28.0		BI-214
0	1377.35	43	39	1.88	2747.72	2743	15	70.0		BI-214
0	1459.79*	746	38	2.15	2912.53	2904	21	8.5		K-40
0	1587.93*	79	49	1.69	3168.80	3160	18	47.4		AC-228
5	1725.51	13	3	2.02	3444.06	3441	15	61.1	5.32E+00	
5	1727.98	51	7	2.12	3449.00	3441	15	32.7		BI-214
0	1762.74*	124	18	2.45	3518.56	3510	22	25.3		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	93.31	236	789	1.29	186.04	169	22	2.18E-02	48.3	2.72E+00	T
0	185.94	341	590	1.39	370.49	366	8	3.16E-02	27.6	3.21E+00	
2	241.10	252	418	1.33	480.37	468	22	2.33E-02	45.0	2.78E+00	
0	328.40	162	362	1.12	654.30	650	11	1.50E-02	48.0	2.20E+00	
0	820.75	25	51	1.44	1636.05	1629	9	2.31E-03	****	1.03E+00	
0	840.51	173	147	13.13	1675.47	1661	33	1.60E-02	45.4	1.01E+00	
5	1725.51	13	3	2.02	3444.06	3441	15	1.23E-03	61.1	5.94E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.423E+00	5.783E-01	1.741E-01	1.121E-02	31.148
TL-208	3.977E-01	5.575E-02	2.509E-02	2.613E-03	15.853
BI-212	7.190E-01	2.011E-01	1.977E-01	2.162E-02	3.636
PB-212	1.078E+00	9.751E-02	4.130E-02	3.156E-03	26.102
BI-214	6.149E-01	9.289E-02	5.222E-02	5.561E-03	11.775
PB-214	6.299E-01	8.284E-02	4.944E-02	3.791E-03	12.740
RA-223	5.247E-01	1.622E-01	1.263E-01	1.124E-02	4.155
AC-228	1.326E+00	1.908E-01	9.052E-02	7.866E-03	14.653
NP-237	5.073E-01	1.852E-01	2.155E-01	2.708E-02	2.355
AM-243	2.179E-01	6.008E-02	5.035E-02	1.004E-02	4.328

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-5.878E-03		1.492E-02	2.482E-02	1.444E-03	-0.237
RH-101	4.463E-04		1.590E-02	2.575E-02	4.020E-03	0.017
SB-125	9.028E-03		3.935E-02	6.756E-02	5.539E-03	0.134
CS-137	-7.275E-03		1.601E-02	2.734E-02	3.110E-03	-0.266
EU-155	3.008E-02		5.799E-02	9.806E-02	9.181E-03	0.307
PO-209	-1.873E+00		3.080E+00	5.068E+00	9.716E-01	-0.370
BI-211	-1.089E-01		4.897E-01	7.219E-01	7.067E-02	-0.151
PA-233	1.272E-02		2.720E-02	4.754E-02	3.829E-03	0.268
PA-234M	3.146E-01		1.593E+00	2.843E+00	2.219E-01	0.111
TH-234	8.439E-01	+	4.166E-01	5.671E-01	5.673E-02	1.488
U-235	3.667E-02		1.067E-01	1.758E-01	1.283E-02	0.209
NP-236	2.516E-02		3.505E-02	5.704E-02	5.670E-03	0.441
NP-239	-6.269E-02		9.909E-02	1.678E-01	2.264E-02	-0.374
AM-241	-1.662E-02		8.803E-02	1.493E-01	9.795E-03	-0.111
CM-243	6.147E-02		5.187E-02	8.892E-02	9.613E-03	0.691
AM-246	-2.144E-02		5.164E-02	8.578E-02	1.097E-02	-0.250
CF-249	1.995E-02		1.718E-02	3.064E-02	2.935E-03	0.651

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 16:56:42

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792213_GAMMA3_400MLSAN_17003.CNF

---- Sample Information ----

Sample ID : OH207-7922-13
Sample Title : SB-CZ-SS-2167-SD
Sample Quantity : 5.53200E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17003

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 5-NOV-2007 13:56:22.
Decay time : 42 13:56:22.39 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:01.31

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.44*	104	860	1.21	140.94	136	9	108.9		TH-234
5	74.80*	905	1061	1.50	166.12	160	19	15.7	1.31E+00	AM-243
										PB-214
										PB-212
5	77.16*	1202	981	1.30	171.35	160	19	11.5		PB-214
										PB-212
2	87.31	550	902	1.53	193.83	178	37	22.2	2.26E+00	NP-237
										PB-214
										PB-212
2	89.93	362	681	1.26	199.64	178	37	28.2		
2	92.76*	558	775	1.55	205.91	178	37	22.9		TH-234
0	186.08*	533	760	1.27	412.76	407	13	23.6		
0	209.05	219	536	1.43	463.69	458	10	41.8		AC-228
3	238.70*	2123	469	1.36	529.41	523	25	5.8	1.06E+00	PB-212
3	241.73	504	585	2.03	536.12	523	25	28.7		PB-214
0	270.35	248	503	1.80	599.55	594	13	39.3		RA-223
										AC-228
0	295.50	625	473	1.32	655.31	648	12	16.0		PB-214
0	300.52	141	407	1.55	666.42	661	13	61.8		PB-212
0	328.59	154	318	1.80	728.65	724	12	49.7		
0	338.36*	434	421	1.32	750.30	743	15	22.8		AC-228
0	352.02*	1291	381	1.58	780.59	773	18	9.0		PB-214
0	462.93	203	178	1.14	1026.39	1019	14	31.3		AC-228
0	510.97*	169	241	1.87	1132.88	1127	15	47.5		TL-208
0	583.27*	712	149	1.65	1293.13	1286	15	10.7		TL-208
0	609.37*	878	192	1.63	1350.98	1344	17	9.9		BI-214
0	661.44	86	101	1.14	1466.38	1459	13	52.5		CS-137
0	727.65	190	129	2.32	1613.12	1605	19	32.1		BI-212
0	786.56	45	123	1.08	1743.68	1737	16	118.6		BI-212
0	794.86	118	63	2.05	1762.08	1755	14	34.0		AC-228
0	861.09	123	86	2.22	1908.86	1901	19	40.5		TL-208
0	911.34*	537	101	2.00	2020.22	2010	22	13.1		AC-228
1	964.69	79	71	2.21	2138.45	2129	27	52.6	2.70E+00	AC-228
1	968.99	282	46	2.22	2148.00	2129	27	16.9		AC-228
0	1001.24*	29	45	1.43	2219.45	2214	11	99.1		PA-234M
0	1120.33*	158	82	2.16	2483.38	2476	15	30.1		BI-214
0	1238.70	82	49	1.66	2745.69	2741	14	44.3		BI-214
0	1460.80*	541	38	1.74	3237.88	3227	22	10.6		K-40
0	1589.54*	85	31	2.17	3523.16	3514	23	40.1		AC-228
0	1729.29	57	11	2.11	3832.81	3823	21	38.8		BI-214
0	1764.76*	146	20	1.57	3911.40	3901	20	22.8		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	89.93	362	681	1.26	199.64	178	37	3.35E-02	28.2	3.55E+00	
0	186.08	533	760	1.27	412.76	407	13	4.94E-02	23.6	2.81E+00	
0	328.59	154	318	1.80	728.65	724	12	1.42E-02	49.7	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.111E+00	4.991E-01	2.135E-01	1.256E-02	19.259
CS-137	4.381E-02	2.323E-02	3.262E-02	2.349E-03	1.343
TL-208	3.255E-01	4.346E-02	2.749E-02	2.188E-03	11.838
BI-212	7.517E-01	2.471E-01	1.930E-01	1.401E-02	3.895
PB-212	9.230E-01	8.707E-02	4.653E-02	3.478E-03	19.837
BI-214	7.643E-01	9.556E-02	5.106E-02	3.891E-03	14.969
PB-214	8.673E-01	1.044E-01	5.166E-02	4.110E-03	16.790
RA-223	3.721E-01	1.498E-01	1.419E-01	1.257E-02	2.621
AC-228	1.173E+00	1.740E-01	1.040E-01	7.314E-03	11.278
PA-234M	2.117E+00	2.103E+00	3.089E+00	2.109E-01	0.685
TH-234	1.314E+00	3.225E-01	3.184E-01	2.850E-02	4.126
NP-237	5.648E-01	1.403E-01	1.383E-01	1.542E-02	4.083
AM-243	1.718E-01	4.260E-02	2.853E-02	5.487E-03	6.021

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	5.598E-03		1.648E-02	2.836E-02	1.504E-03	0.197
RH-101	-7.715E-03		1.684E-02	2.792E-02	4.309E-03	-0.276
SB-125	2.176E-02		4.361E-02	7.716E-02	6.378E-03	0.282
EU-155	1.637E-02		4.825E-02	8.351E-02	7.853E-03	0.196
PO-209	1.210E+00		3.277E+00	5.913E+00	1.090E+00	0.205
BI-211	8.662E-02		5.090E-01	8.732E-01	6.288E-02	0.099
PA-233	1.646E-03		2.981E-02	5.000E-02	4.081E-03	0.033
U-235	1.719E-01		1.047E-01	1.834E-01	1.362E-02	0.937
NP-236	2.891E-02		3.140E-02	4.591E-02	4.381E-03	0.630
NP-239	7.945E-03		1.085E-01	1.831E-01	2.449E-02	0.043
AM-241	7.061E-03		3.363E-02	4.895E-02	3.098E-03	0.144
CM-243	1.902E-02		4.388E-02	7.609E-02	8.199E-03	0.250
AM-246	2.811E-02		5.286E-02	9.728E-02	1.228E-02	0.289
CF-249	-4.955E-03		1.751E-02	3.014E-02	3.002E-03	-0.164

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 19:57:03

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792214_GAMMA1_400MLSAN_17004.CNF

---- Sample Information ----

Sample ID	: OH207-7922-14		
Sample Title	: SB-CZ-SS-2168-SD		
Sample Quantity	: 4.34800E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17004		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 16:56:32.
Decay time	: 42 16:56:32.53	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:02.69

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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 Z Moore Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.33*	134	662	1.13	126.04	122	9	72.6		
1	74.89	448	583	1.02	149.19	145	14	19.5	1.55E+00	AM-243
										PB-214
										PB-212
1	77.20*	730	600	0.96	153.81	145	14	13.0		PB-214
										PB-212
5	87.37	339	564	1.16	174.17	163	29	25.7	1.55E+00	NP-237
										PB-214
										PB-212
5	89.98	235	476	0.99	179.42	163	29	32.5		
0	129.03	120	536	1.11	257.60	255	7	66.6		AC-228
0	153.67	89	469	1.17	306.95	304	7	82.7		
0	185.87*	383	695	1.20	371.43	366	12	29.9		
1	209.10	226	356	1.24	417.94	413	13	31.2	4.37E+00	AC-228
1	210.24	63	355	1.24	420.23	413	13	112.1		
5	238.61*	2296	303	1.03	477.02	472	18	4.8	1.35E+00	PB-212
5	241.49	540	449	1.88	482.80	472	18	23.9		PB-214
0	270.07	271	478	1.71	540.03	534	14	36.3		RA-223
										AC-228
0	277.48	136	292	1.12	554.85	551	10	50.1		TL-208
0	295.13	542	310	1.33	590.19	586	10	14.9		PB-214
0	299.97	161	309	1.05	599.89	596	9	42.5		PB-212
0	327.74	153	220	1.47	655.48	651	8	37.3		
0	338.30*	521	240	1.33	676.63	671	10	14.3		AC-228
0	351.88*	839	272	1.32	703.81	698	11	10.3		PB-214
0	409.27	82	149	0.91	818.74	815	8	56.4		AC-228
0	462.92	200	206	1.56	926.15	919	15	34.3		AC-228
0	510.82*	295	184	1.77	1022.05	1015	17	26.4		TL-208
0	583.05*	715	212	1.34	1166.67	1160	15	11.7		TL-208
0	609.14*	673	186	1.47	1218.90	1213	14	11.7		BI-214
0	727.16	153	117	1.10	1455.18	1450	11	32.2		BI-212
0	754.57	62	95	3.36	1510.07	1504	13	69.5		
0	767.61	52	95	1.47	1536.17	1532	9	73.5		BI-214
2	785.33	59	72	1.93	1571.64	1567	33	58.7	1.49E+00	BI-212
2	794.66	88	77	1.94	1590.33	1567	33	47.0		AC-228
0	860.39	91	78	1.31	1721.91	1716	13	45.7		TL-208
0	910.78*	654	31	1.59	1822.78	1816	15	8.7		AC-228
3	964.14	108	60	1.98	1929.61	1923	27	33.1	3.53E+00	AC-228
3	968.55*	311	37	1.73	1938.44	1923	27	13.7		AC-228
0	1119.78	153	69	1.81	2241.16	2233	14	28.3		BI-214
0	1237.90	78	76	1.33	2477.62	2470	16	54.6		BI-214
0	1377.92	47	33	1.10	2757.89	2751	15	65.0		BI-214
0	1460.10*	640	48	2.09	2922.37	2913	17	9.4		K-40
0	1567.85	17	10	2.34	3138.03	3133	9	83.7		
0	1587.30	29	40	1.14	3176.96	3172	10	90.8		AC-228
0	1763.90*	90	38	2.32	3530.40	3524	13	36.1		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	63.33	134	662	1.13	126.04	122	9	1.24E-02	72.6	1.09E+00	T
5	89.98	235	476	0.99	179.42	163	29	2.17E-02	32.5	2.33E+00	
0	153.67	89	469	1.17	306.95	304	7	8.28E-03	82.7	3.17E+00	
0	185.87	383	695	1.20	371.43	366	12	3.55E-02	29.9	3.03E+00	
1	210.24	63	355	1.24	420.23	413	13	5.81E-03	****	2.86E+00	
0	327.74	153	220	1.47	655.48	651	8	1.42E-02	37.3	2.11E+00	
0	754.57	62	95	3.36	1510.07	1504	13	5.73E-03	69.5	1.10E+00	
0	1567.85	17	10	2.34	3138.03	3133	9	1.60E-03	83.7	6.71E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.883E+00	5.673E-01	1.728E-01	1.179E-02	28.266
TL-208	3.655E-01	5.638E-02	2.656E-02	2.665E-03	13.762
BI-212	6.567E-01	2.205E-01	2.091E-01	2.012E-02	3.140
PB-212	1.148E+00	1.046E-01	4.539E-02	3.503E-03	25.294
BI-214	6.524E-01	1.014E-01	5.467E-02	5.568E-03	11.933
PB-214	6.455E-01	8.398E-02	5.112E-02	4.034E-03	12.629
RA-223	4.661E-01	1.746E-01	1.366E-01	1.257E-02	3.411
AC-228	1.500E+00	1.551E-01	8.326E-02	4.601E-03	18.019
NP-237	7.172E-01	2.117E-01	2.191E-01	3.168E-02	3.274
AM-243	2.263E-01	6.485E-02	5.733E-02	1.203E-02	3.948

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-6.504E-03		1.643E-02	2.735E-02	1.669E-03	-0.238
RH-101	-4.785E-03		1.704E-02	2.792E-02	4.330E-03	-0.171
SB-125	3.582E-03		4.158E-02	7.171E-02	5.881E-03	0.050
CS-137	2.102E-02		1.708E-02	3.203E-02	3.442E-03	0.656
EU-155	9.588E-02		6.068E-02	1.066E-01	1.058E-02	0.899
PO-209	2.214E+00		2.929E+00	5.413E+00	9.688E-01	0.409
BI-211	-2.168E-01		4.382E-01	7.424E-01	5.409E-02	-0.292
PA-233	1.922E-02		2.772E-02	4.960E-02	4.165E-03	0.387
PA-234M	1.229E-01		1.793E+00	3.148E+00	1.810E-01	0.039
TH-234	1.376E+00		3.670E-01	6.249E-01	7.290E-02	2.202
U-235	5.751E-02		1.045E-01	1.765E-01	1.232E-02	0.326
NP-236	1.334E-02		3.906E-02	6.028E-02	6.622E-03	0.221
NP-239	3.897E-02		1.116E-01	1.845E-01	2.489E-02	0.211
AM-241	2.451E-03		1.120E-01	1.750E-01	1.391E-02	0.014
CM-243	-3.230E-02		5.484E-02	9.105E-02	1.038E-02	-0.355
AM-246	-1.229E-02		5.426E-02	9.245E-02	1.138E-02	-0.133
CF-249	1.612E-03		1.808E-02	3.127E-02	3.017E-03	0.052

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:	9/27/2007	Client Project Manager:	Greg Miller
SC&A Project Manager:			
S7921 7924			

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7923-PB ✓		9/27/2007 8:45:00 AM	
SCAQC	7923-LD1 OH207-7923-01	SB-CZ-SS-2169-ST	9/24/2007	
SCAQC	7923-LC1 ✓		9/27/2007 8:45:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7923-01 ✓	SB-CZ-SS-2169-ST	9/24/2007	
OH207	7923-02 ✓	SB-CZ-SS-2170-ST	9/24/2007	
OH207	7923-03 ✓	SB-CZ-SS-2171-ST	9/24/2007	
OH207	7923-04 ✓	SB-CZ-SS-2172-ST	9/24/2007	

Radiochemistry Reviewer 11/07/07 Date

QA Reviewer 11/07/2007 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
11-05-07 1356 G3	180	OH207	7922	13	—	9-24-07	SB-CZ-SS-2167-SD	SOIL	553.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 G1	180	OH207	7922	14	—	9-24-07	2168-SD		434.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1955 G2	180	SCAQC	7923	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1655 G3	60			LC1	—		CTRL SAMP S-142	SOIL	640 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1655 G2	180			LD1	—	9-24-07	DUP 7923-01	SOIL	484.9 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 2010 G1	0	OH207		01	—		SB-CZ-SS-2169-ST		~~479.8~~ 484.9 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 2010 G3				02	—		2170-ST		479.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G4				03	—		2171-ST		332.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G2				04	—		2172-ST		470.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G3	180	SCAQC	7924	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐

gamma1 = G1
gamma2 = G2

SC&A - Southeastern Environmental Laboratory
SCA-Form 012 Rev. 1

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 22:59:27

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7923PB1_GAMMA2_400MLSA_17008.CNF

---- Sample Information ----

Sample ID	: SCAQC-7923-PB1		
Sample Title	: PREP BLK		
Sample Quantity	: 4.00000E+02 G		
Sample Type	: LIQUID		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17008		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 5-NOV-2007 19:59:11.
Decay time	: 39 11:14:11.77	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:00.62

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	352.94*	85	102	1.88	703.18	695	18	62.7		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	352.94	85	102	1.88	703.18	695	18	7.84E-03	62.7	2.07E+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	3.528E-02		1.197E-01	2.592E-01	1.669E-02	0.136
CO-60	-3.002E-04		9.298E-03	1.766E-02	9.756E-04	-0.017
RH-101	3.663E-03		1.076E-02	1.803E-02	2.815E-03	0.203
SB-125	3.872E-03		2.626E-02	4.664E-02	3.824E-03	0.083
CS-137	2.434E-03		9.971E-03	1.874E-02	2.132E-03	0.130
EU-155	-1.505E-02		3.490E-02	5.804E-02	5.435E-03	-0.259
TL-208	7.287E-03		1.141E-02	2.137E-02	2.225E-03	0.341
PO-209	1.491E-01		2.015E+00	3.701E+00	7.096E-01	0.040
BI-211	-2.971E-02		2.597E-01	4.699E-01	4.600E-02	-0.063
BI-212	8.727E-02		7.354E-02	1.505E-01	1.645E-02	0.580
PB-212	-5.530E-04		1.819E-02	3.191E-02	2.439E-03	-0.017
BI-214	1.649E-02		2.377E-02	4.572E-02	4.868E-03	0.361
PB-214	6.790E-02	+	4.288E-02	4.385E-02	3.362E-03	1.548
RA-223	-9.445E-03		5.540E-02	9.466E-02	8.422E-03	-0.100
AC-228	1.813E-02		4.230E-02	8.200E-02	7.125E-03	0.221
PA-233	-1.283E-02		1.928E-02	3.228E-02	2.600E-03	-0.398
PA-234M	-5.039E-01		1.242E+00	2.167E+00	1.691E-01	-0.233
TH-234	-9.823E-02		1.813E-01	3.298E-01	3.299E-02	-0.298
U-235	2.146E-02		6.183E-02	1.035E-01	7.552E-03	0.207
NP-236	-6.742E-03		2.023E-02	3.394E-02	3.374E-03	-0.199
NP-237	3.959E-02		7.463E-02	1.286E-01	1.616E-02	0.308
NP-239	5.425E-03		6.368E-02	1.134E-01	1.530E-02	0.048
AM-241	-9.526E-03		4.911E-02	8.500E-02	5.576E-03	-0.112
AM-243	-9.757E-04		1.686E-02	2.903E-02	5.787E-03	-0.034
CM-243	9.448E-04		3.169E-02	5.422E-02	5.862E-03	0.017
AM-246	1.226E-03		3.339E-02	6.136E-02	7.848E-03	0.020
CF-249	1.481E-03		1.276E-02	2.241E-02	2.147E-03	0.066

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 18:00:41

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7923LC1_GAMMA3_400MLSA_17006.CNF

---- Sample Information ----

Sample ID	: SCAQC-7923-LC1		
Sample Title	: CTRL SAMP S-142		
Sample Quantity	: 6.40000E+02 G		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17006		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 5-NOV-2007 16:59:38.
Decay time	: 39 08:14:38.07	% dead time	: 0.2%
Elapsed live time	: 0 01:00:00.00	Elapsed real time	: 0 01:00:05.57

---- 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:

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

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
10	51.50	8196	16077	3.27	114.46	101	40	8.1	3.01E+02	
10	59.52	76416	5500	1.57	132.24	101	40	0.8		AM-241
0	88.06	14773	4916	1.30	195.50	188	13	2.5		
0	92.51*	166	2262	1.49	205.37	202	8	101.5		
0	122.07	2175	3604	1.42	270.89	264	13	12.2		
0	238.56*	379	2175	1.45	529.10	525	9	45.6		
0	661.61	23011	1319	1.70	1466.76	1457	18	1.5		CS-137
0	1173.22	17541	816	2.01	2600.60	2589	24	1.7		CO-60
0	1332.50	16224	147	2.19	2953.56	2941	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	8196	16077	3.27	114.46	101	40	2.28E+00	8.1	2.99E+00	
0	88.06	14773	4916	1.30	195.50	188	13	4.10E+00	2.5	3.55E+00	T
0	92.51	166	2262	1.49	205.37	202	8	4.62E-02	****	3.55E+00	T
0	122.07	2175	3604	1.42	270.89	264	13	6.04E-01	12.2	3.39E+00	
0	238.56	379	2175	1.45	529.10	525	9	1.05E-01	45.6	2.40E+00	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
CO-60	3.178E+01	2.012E+00	1.062E-01	5.634E-03	299.130
CS-137	3.027E+01	2.227E+00	1.889E-01	1.360E-02	160.257
AM-241	7.699E+01	4.912E+00	3.350E-01	2.120E-02	229.802

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

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	4.219E-01		4.881E-01	9.148E-01	5.382E-02	0.461
RH-101	-3.013E-02		8.717E-02	1.446E-01	2.232E-02	-0.208
SB-125	2.912E-01		3.097E-01	5.308E-01	4.388E-02	0.549
EU-155	-8.423E-02		2.280E-01	3.862E-01	3.631E-02	-0.218
TL-208	8.429E-02		1.103E-01	1.875E-01	1.493E-02	0.449
PO-209	-2.514E+01		3.035E+01	5.008E+01	9.227E+00	-0.502
BI-211	-1.310E+00		3.727E+00	6.070E+00	4.372E-01	-0.216
BI-212	3.166E-01		8.577E-01	1.435E+00	1.041E-01	0.221
PB-212	4.270E-01	+	1.974E-01	2.834E-01	2.118E-02	1.507
BI-214	2.723E-01		2.028E-01	3.475E-01	2.648E-02	0.784
PB-214	3.164E-01		2.123E-01	3.534E-01	2.811E-02	0.895
RA-223	-5.357E-02		5.113E-01	8.426E-01	7.459E-02	-0.064
AC-228	7.982E-01		5.698E-01	9.862E-01	6.934E-02	0.809
PA-233	1.001E-01		1.902E-01	3.147E-01	2.568E-02	0.318
PA-234M	-1.151E+00		1.724E+01	2.907E+01	1.985E+00	-0.040
TH-234	1.016E+00	+	1.035E+00	1.520E+00	1.361E-01	0.668
U-235	3.669E-01		4.747E-01	8.084E-01	6.001E-02	0.454
NP-236	-2.120E-02		1.303E-01	2.096E-01	2.000E-02	-0.101
NP-237	2.981E+01		3.416E+00	1.529E+00	1.704E-01	19.506
NP-239	-2.480E-01		6.439E-01	1.061E+00	1.420E-01	-0.234
AM-243	-5.603E-02		9.333E-02	1.493E-01	2.872E-02	-0.375
CM-243	5.764E-02		2.080E-01	3.554E-01	3.830E-02	0.162
AM-246	-2.515E-01		5.254E-01	8.727E-01	1.102E-01	-0.288
CF-249	3.670E-02		1.222E-01	2.090E-01	2.081E-02	0.176

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 19:58:04

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7923LD1_GAMMA2_400MLSA_17005.CNF

---- Sample Information ----

Sample ID : SCAQC-7923-LD1
Sample Title : DUP 7923-01
Sample Quantity : 4.84900E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17005

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 5-NOV-2007 16:57:49.
Decay time : 42 16:57:49.05 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:01.49

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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 Hoar Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.82	400	555	0.91	149.23	145	13	20.3	8.14E-01	AM-243
										PB-214
										PB-212
2	77.08	688	639	1.01	153.72	145	13	14.0		PB-214
										PB-212
9	87.22*	307	586	1.21	173.91	165	26	29.1	2.43E+00	NP-237
										PB-214
										PB-212
9	89.12	179	978	2.04	177.69	165	26	75.8		
9	92.78*	379	700	1.48	184.97	165	26	28.8		
0	105.07	122	675	1.54	209.46	205	9	79.1		EU-155
0	128.46	68	604	0.77	256.02	254	7	122.2		AC-228
0	186.00*	322	695	1.31	370.61	366	10	33.3		
0	209.27	200	493	1.07	416.97	413	8	41.2		AC-228
1	238.79*	2153	346	1.18	475.76	468	19	5.2	3.76E+00	PB-212
1	241.34	280	357	1.31	480.83	468	19	32.6		
1	242.30	249	352	1.34	482.76	468	19	32.3		PB-214
0	270.21*	191	510	1.59	538.35	533	12	49.8		RA-223
										AC-228
0	277.89	122	394	0.84	553.65	549	10	63.6		TL-208
0	295.37*	547	306	1.11	588.47	584	8	14.1		PB-214
0	300.59	122	347	1.14	598.89	594	9	58.0		PB-212
0	328.35	173	232	1.36	654.18	650	9	35.3		
0	338.41*	424	395	1.14	674.22	669	12	21.2		AC-228
0	352.15*	1050	318	1.25	701.62	696	13	9.4		PB-214
0	409.93	107	183	1.16	816.76	813	9	49.7		AC-228
0	463.05	110	167	1.28	922.64	918	9	46.4		AC-228
0	510.94*	210	248	1.70	1018.11	1011	15	38.3		TL-208
0	583.36*	656	145	1.48	1162.50	1157	12	10.8		TL-208
0	609.57*	755	180	1.36	1214.77	1209	14	10.6		BI-214
0	661.76	394	105	1.54	1318.84	1313	11	14.2		CS-137
0	727.56	132	149	1.58	1450.10	1443	16	44.6		BI-212
0	795.45	60	97	1.89	1585.55	1579	11	68.8		AC-228
0	860.66*	79	77	1.58	1715.70	1710	12	50.7		TL-208
0	911.06*	481	72	1.50	1816.29	1810	14	11.9		AC-228
0	935.01	86	39	2.05	1864.09	1859	15	36.9		BI-214
2	964.66	96	51	2.03	1923.28	1915	34	36.1	8.91E-01	AC-228
2	968.86*	324	40	1.90	1931.66	1915	34	13.6		AC-228
0	1120.25*	115	116	1.76	2233.98	2227	17	47.5		BI-214
0	1237.85	61	48	2.05	2468.92	2462	12	52.2		BI-214
0	1376.92	57	32	1.82	2746.86	2738	14	49.7		BI-214
0	1459.79*	545	22	2.10	2912.53	2906	15	9.6		K-40
0	1619.63	21	22	1.21	3232.21	3225	13	105.2		BI-212
0	1728.39	39	14	1.98	3449.83	3442	14	51.7		BI-214
0	1762.73*	141	14	2.05	3518.54	3509	19	21.9		BI-214
0	1808.67	18	3	1.01	3610.50	3604	12	60.9		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
9	89.12	179	978	2.04	177.69	165	26	1.65E-02	75.8	2.58E+00	
9	92.78	379	700	1.48	184.97	165	26	3.51E-02	28.8	2.70E+00	T
0	186.00	322	695	1.31	370.61	366	10	2.98E-02	33.3	3.21E+00	
1	241.34	280	357	1.31	480.83	468	19	2.59E-02	32.6	2.78E+00	
0	328.35	173	232	1.36	654.18	650	9	1.60E-02	35.3	2.20E+00	
0	1808.67	18	3	1.01	3610.50	3604	12	1.67E-03	60.9	5.72E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.906E+00	4.507E-01	1.703E-01	1.096E-02	22.934
CS-137	1.967E-01	3.586E-02	2.652E-02	3.017E-03	7.416
EU-155	9.885E-02	7.874E-02	8.860E-02	8.296E-03	1.116
TL-208	2.969E-01	4.463E-02	2.477E-02	2.579E-03	11.987
BI-212	5.135E-01	2.358E-01	1.892E-01	2.068E-02	2.714
PB-212	9.163E-01	8.486E-02	4.086E-02	3.123E-03	22.422
BI-214	6.501E-01	9.778E-02	4.602E-02	4.900E-03	14.126
PB-214	6.946E-01	8.446E-02	4.549E-02	3.488E-03	15.269
RA-223	2.798E-01	1.417E-01	1.265E-01	1.125E-02	2.213
AC-228	1.013E+00	1.490E-01	7.866E-02	6.835E-03	12.879
NP-237	5.165E-01	1.639E-01	1.858E-01	2.335E-02	2.780
AM-243	1.554E-01	4.415E-02	4.559E-02	9.088E-03	3.408

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.537E-03		1.337E-02	2.408E-02	1.401E-03	0.147
RH-101	-2.717E-03		1.568E-02	2.521E-02	3.936E-03	-0.108
SB-125	3.811E-03		3.903E-02	6.655E-02	5.456E-03	0.057
PO-209	1.504E+00		2.736E+00	4.961E+00	9.511E-01	0.303
BI-211	3.276E-02		4.016E-01	7.055E-01	6.906E-02	0.046
PA-233	-1.328E-02		2.566E-02	4.310E-02	3.471E-03	-0.308
PA-234M	5.289E-01		1.538E+00	2.785E+00	2.174E-01	0.190
TH-234	1.341E+00	+	4.084E-01	5.297E-01	5.298E-02	2.531
U-235	-4.900E-03		9.679E-02	1.579E-01	1.153E-02	-0.031
NP-236	2.316E-02		3.339E-02	5.440E-02	5.408E-03	0.426
NP-239	1.076E-02		9.567E-02	1.664E-01	2.245E-02	0.065
AM-241	3.187E-02		8.162E-02	1.409E-01	9.243E-03	0.226
CM-243	1.373E-02		5.450E-02	8.219E-02	8.886E-03	0.167
AM-246	1.417E-02		4.739E-02	8.451E-02	1.081E-02	0.168
CF-249	1.104E-02		1.667E-02	2.923E-02	2.800E-03	0.378

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 23:00:26

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792301_GAMMA1_400MLSAN_17009.CNF

---- Sample Information ----

Sample ID	: OH207-7923-01		
Sample Title	: SB-CZ-SS-2169-ST		
Sample Quantity	: 4.84900E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17009		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 20:00:08.
Decay time	: 42 20:00:08.66	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:02.66

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	72.83	127	397	1.23	145.07	142	17	49.9	4.81E-01	
3	74.93	445	475	0.96	149.28	142	17	18.4		AM-243
										PB-214
										PB-212
3	77.19*	712	552	1.16	153.80	142	17	13.8		PB-214
										PB-212
3	87.25	201	471	0.80	173.95	171	20	34.9	1.45E+00	NP-237
										PB-214
										PB-212
3	90.05	164	447	0.85	179.55	171	20	41.3		
3	92.96*	226	659	1.28	185.38	171	20	44.1		
0	128.97	118	541	0.65	257.47	254	7	67.9		AC-228
0	186.03*	269	618	1.14	371.74	368	10	37.4		
0	209.07	248	715	0.94	417.88	412	12	45.1		AC-228
1	238.62*	2097	347	1.18	477.05	470	23	5.3	1.01E+00	PB-212
1	241.12	237	289	1.11	482.04	470	23	31.8		
1	241.99	209	324	1.28	483.79	470	23	37.4		PB-214
1	269.94	171	273	1.32	539.76	534	26	38.3	1.32E+00	RA-223
										AC-228
1	271.01	65	275	1.32	541.90	534	26	99.6		
1	277.43	92	249	1.09	554.76	534	26	59.7		TL-208
0	288.29	69	170	0.93	576.50	574	6	64.1		
1	295.11	632	212	1.34	590.16	586	20	11.2	3.25E+00	PB-214
1	299.90	200	218	1.35	599.75	586	20	29.0		PB-212
0	328.41	130	348	1.30	656.82	652	11	58.3		
0	338.09*	392	346	1.19	676.22	672	11	21.0		AC-228
0	351.86*	1044	295	1.12	703.78	698	13	9.2		PB-214
0	409.15	92	156	1.17	818.50	814	9	53.5		AC-228
0	463.29	123	188	1.62	926.89	922	10	45.8		AC-228
0	510.79*	349	191	1.97	1022.00	1015	17	22.9		TL-208
0	582.88*	701	121	1.34	1166.34	1161	13	10.0		TL-208
0	609.02*	783	172	1.65	1218.65	1212	13	10.0		BI-214
0	661.35	394	123	1.42	1323.43	1317	12	15.1		CS-137
0	727.21	144	125	1.48	1455.29	1448	13	36.3		BI-212
0	768.44	74	168	1.67	1537.84	1530	18	85.0		BI-214
0	860.92	69	87	1.42	1722.97	1716	13	61.2		TL-208
0	910.71*	516	38	1.58	1822.64	1816	15	10.4		AC-228
2	964.23	90	57	2.06	1929.79	1922	25	39.0	8.78E-01	AC-228
2	968.56*	286	44	1.87	1938.46	1922	25	15.3		AC-228
0	1119.62	175	60	2.15	2240.85	2234	15	23.4		BI-214
0	1237.14	75	34	1.94	2476.09	2469	12	38.3		BI-214
0	1459.77*	605	27	1.90	2921.72	2912	18	9.2		K-40
0	1763.71*	141	19	2.55	3530.02	3520	21	23.7		BI-214
0	1846.37	38	9	2.36	3695.46	3688	13	47.3		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	72.83	127	397	1.23	145.07	142	17	1.17E-02	49.9	1.58E+00	
3	90.05	164	447	0.85	179.55	171	20	1.51E-02	41.3	2.33E+00	
3	92.96	226	659	1.28	185.38	171	20	2.09E-02	44.1	2.43E+00	T
0	186.03	269	618	1.14	371.74	368	10	2.49E-02	37.4	3.03E+00	
1	241.12	237	289	1.11	482.04	470	23	2.19E-02	31.8	2.64E+00	
1	271.01	65	275	1.32	541.90	534	26	6.04E-03	99.6	2.44E+00	
0	288.29	69	170	0.93	576.50	574	6	6.41E-03	64.1	2.33E+00	
0	328.41	130	348	1.30	656.82	652	11	1.20E-02	58.3	2.10E+00	
0	1846.37	38	9	2.36	3695.46	3688	13	3.48E-03	47.3	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.138E+00	4.735E-01	1.724E-01	1.177E-02	24.001
CS-137	1.975E-01	3.662E-02	2.831E-02	3.042E-03	6.976
TL-208	3.216E-01	4.554E-02	2.479E-02	2.487E-03	12.976
BI-212	5.542E-01	2.083E-01	1.841E-01	1.771E-02	3.011
PB-212	9.405E-01	8.797E-02	3.933E-02	3.035E-03	23.912
BI-214	6.806E-01	9.734E-02	4.764E-02	4.852E-03	14.288
PB-214	7.202E-01	8.747E-02	4.595E-02	3.626E-03	15.674
RA-223	2.635E-01	1.039E-01	1.163E-01	1.070E-02	2.265
AC-228	1.062E+00	1.246E-01	7.531E-02	4.162E-03	14.097
NP-237	3.804E-01	1.438E-01	2.285E-01	3.305E-02	1.665
AM-243	2.016E-01	5.630E-02	4.729E-02	9.920E-03	4.263

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-3.906E-03		1.277E-02	2.157E-02	1.316E-03	-0.181
RH-101	-1.123E-02		1.520E-02	2.436E-02	3.778E-03	-0.461
SB-125	-3.193E-02		3.827E-02	6.249E-02	5.124E-03	-0.511
EU-155	8.266E-02		5.555E-02	9.733E-02	9.663E-03	0.849
PO-209	5.797E-01		2.675E+00	4.777E+00	8.549E-01	0.121
BI-211	1.617E-02		3.909E-01	6.895E-01	5.023E-02	0.023
PA-233	1.251E-02		2.546E-02	4.515E-02	3.791E-03	0.277
PA-234M	1.536E+00		1.500E+00	2.850E+00	1.638E-01	0.539
TH-234	8.917E-01	+	4.065E-01	5.361E-01	6.254E-02	1.663
U-235	4.994E-02		9.755E-02	1.644E-01	1.148E-02	0.304
NP-236	7.811E-03		3.284E-02	5.370E-02	5.899E-03	0.145
NP-239	7.652E-02		9.875E-02	1.653E-01	2.230E-02	0.463
AM-241	-3.233E-02		8.884E-02	1.524E-01	1.212E-02	-0.212
CM-243	2.994E-02		5.044E-02	8.688E-02	9.901E-03	0.345
AM-246	1.664E-02		4.303E-02	7.820E-02	9.624E-03	0.213
CF-249	-1.061E-03		1.698E-02	2.909E-02	2.806E-03	-0.036

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 23:01:40

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792302_GAMMA3_400MLSAN_17010.CNF

---- Sample Information ----

Sample ID	: OH207-7923-02
Sample Title	: SB-CZ-SS-2170-ST
Sample Quantity	: 4.79800E+02 GDRY
Sample Type	: SOIL
Sample Geometry	: 400 ml sand
Sample Seq No.	: 17010

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 5-NOV-2007 20:01:21.
Decay time	: 42 20:01:21.26	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:00.97

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.31*	136	396	1.23	102.97	98	11	62.5		
0	63.23*	144	706	1.31	140.46	135	10	74.8		TH-234
2	74.76*	617	930	1.59	166.02	159	18	22.5	1.11E+00	AM-243
										PB-214
										PB-212
2	77.15*	1013	748	1.29	171.32	159	18	12.2		PB-214
										PB-212
3	84.23*	269	617	1.77	187.01	182	32	37.2	7.78E-01	
3	87.29	463	613	1.46	193.80	182	32	22.5		NP-237
										PB-214
										PB-212
3	89.94	300	670	1.68	199.67	182	32	37.8		
3	92.80*	451	726	1.79	206.01	182	32	28.1		TH-234
0	128.74	73	587	1.39	285.67	282	9	122.5		AC-228
0	185.53*	342	802	1.49	411.55	404	17	40.2		
0	209.32	139	436	1.21	464.28	460	10	58.7		AC-228
3	238.67*	1705	287	1.42	529.34	521	21	6.2	1.70E+00	PB-212
3	241.65	423	329	1.84	535.93	521	21	24.4		PB-214
0	270.38	180	321	1.20	599.62	594	13	43.4		RA-223
										AC-228
0	277.55	82	272	1.22	615.52	610	11	81.9		TL-208
0	295.23	437	367	1.41	654.71	647	14	20.9		PB-214
0	338.31*	227	338	1.21	750.19	744	14	36.9		AC-228
0	352.01*	782	281	1.50	780.55	774	14	11.6		PB-214
0	462.90	102	179	1.87	1026.33	1019	14	58.8		AC-228
0	510.71*	243	171	2.17	1132.29	1123	19	31.5		TL-208
0	583.09*	530	116	1.53	1292.73	1284	16	12.7		TL-208
0	609.34*	557	157	1.59	1350.91	1342	17	13.5		BI-214
0	661.31	226	111	2.35	1466.09	1456	18	25.6		CS-137
0	727.14	153	90	1.85	1611.99	1605	15	31.6		BI-212
0	785.63	48	49	0.94	1741.63	1736	10	63.6		BI-212
0	911.18*	359	103	1.85	2019.87	2012	19	17.2		AC-228
0	969.28	194	99	1.66	2148.62	2140	15	27.0		AC-228
0	1120.55*	141	40	1.61	2483.85	2475	18	27.5		BI-214
0	1377.33	53	4	4.62	3052.90	3045	16	32.3		BI-214
0	1460.72*	331	15	1.75	3237.69	3227	20	12.9		K-40
0	1764.28*	80	24	1.60	3910.34	3901	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	46.31	136	396	1.23	102.97	98	11	1.26E-02	62.5	2.76E+00	
3	84.23	269	617	1.77	187.01	182	32	2.49E-02	37.2	3.55E+00	
3	89.94	300	670	1.68	199.67	182	32	2.78E-02	37.8	3.55E+00	
0	185.53	342	802	1.49	411.55	404	17	3.17E-02	40.2	2.82E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.905E+00	4.109E-01	2.163E-01	1.273E-02	13.429
CS-137	1.325E-01	3.529E-02	2.869E-02	2.065E-03	4.618
TL-208	2.798E-01	4.204E-02	2.846E-02	2.265E-03	9.830
BI-212	6.957E-01	2.255E-01	2.280E-01	1.655E-02	3.051
PB-212	8.549E-01	8.295E-02	4.572E-02	3.417E-03	18.700
BI-214	5.587E-01	8.659E-02	5.246E-02	3.997E-03	10.650
PB-214	6.055E-01	8.535E-02	5.458E-02	4.342E-03	11.094
RA-223	3.119E-01	1.382E-01	1.377E-01	1.219E-02	2.264
AC-228	9.025E-01	1.680E-01	9.848E-02	6.924E-03	9.165
TH-234	1.225E+00	3.611E-01	3.238E-01	2.898E-02	3.783
NP-237	5.488E-01	1.379E-01	1.407E-01	1.568E-02	3.901
AM-243	1.351E-01	3.997E-02	2.888E-02	5.554E-03	4.676

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-4.329E-03		1.489E-02	2.585E-02	1.573E-03	-0.167
RH-101	1.869E-04		1.687E-02	2.847E-02	4.395E-03	0.007
SB-125	-1.071E-02		4.203E-02	7.247E-02	5.991E-03	-0.148
EU-155	5.195E-02		4.881E-02	8.600E-02	8.087E-03	0.604
PO-209	-1.642E+00		3.019E+00	5.143E+00	9.476E-01	-0.319
BI-211	-1.289E-01		4.598E-01	7.729E-01	5.566E-02	-0.167
PA-233	-1.171E-02		2.899E-02	4.782E-02	3.903E-03	-0.245
PA-234M	1.670E+00		1.970E+00	3.690E+00	2.519E-01	0.453
U-235	5.275E-02		1.011E-01	1.750E-01	1.299E-02	0.301
NP-236	2.923E-02		3.126E-02	4.610E-02	4.399E-03	0.634
NP-239	2.264E-02		1.063E-01	1.811E-01	2.422E-02	0.125
AM-241	3.074E-02		3.429E-02	5.149E-02	3.258E-03	0.597
CM-243	2.259E-02		4.374E-02	7.633E-02	8.226E-03	0.296
AM-246	-1.016E-02		4.790E-02	8.443E-02	1.066E-02	-0.120
CF-249	1.151E-02		1.926E-02	3.442E-02	3.429E-03	0.334

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 03:05:17

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792303_GAMMA1_400MLSAN_17011.CNF

---- Sample Information ----

Sample ID	: OH207-7923-03		
Sample Title	: SB-CZ-SS-2171-ST		
Sample Quantity	: 3.32200E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17011		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 6-NOV-2007 00:04:56.
Decay time	: 43 00:04:56.93	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.91

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.94	300	376	1.12	149.30	144	16	24.6	1.22E+00	AM-243
										PB-214
										PB-212
2	77.19*	507	331	1.13	153.80	144	16	15.9		PB-214
										PB-212
0	87.29	136	312	1.04	174.02	172	6	44.7		NP-237
										PB-214
										PB-212
6	90.03	178	189	1.02	179.52	177	13	25.7	2.34E+00	
6	92.87*	221	421	1.45	185.20	177	13	37.9		
0	185.89*	154	298	1.19	371.46	368	8	44.4		
0	209.10	147	296	1.07	417.94	414	9	45.3		AC-228
3	238.59*	1269	202	1.07	476.99	472	29	6.7	1.62E+00	PB-212
3	241.08	150	245	1.32	481.96	472	29	49.3		
3	241.86	106	243	1.36	483.54	472	29	61.2		PB-214
0	270.04	164	291	1.52	539.95	534	15	47.7		RA-223
										AC-228
0	295.06	276	247	1.20	590.05	583	13	26.4		PB-214
0	300.09	64	184	1.36	600.12	596	9	79.8		PB-212
0	328.03	60	156	1.20	656.06	651	8	76.3		
0	338.21*	258	243	1.27	676.46	672	12	27.2		AC-228
0	351.62*	502	159	1.38	703.31	696	14	14.1		PB-214
0	462.61	114	109	1.14	925.53	920	13	41.8		AC-228
0	510.96*	196	174	1.94	1022.34	1013	18	38.1		TL-208
0	582.75*	422	96	1.49	1166.07	1159	13	13.9		TL-208
0	609.00*	353	67	1.48	1218.63	1213	12	14.4		BI-214
0	661.14	179	55	1.62	1323.01	1316	13	22.8		CS-137
0	727.39	64	100	1.50	1455.65	1448	13	69.6		BI-212
0	772.96	28	52	2.16	1546.88	1540	10	102.6		
0	794.85	70	52	3.98	1590.70	1584	16	52.2		AC-228
0	860.26	50	40	1.75	1721.64	1717	10	55.1		TL-208
0	910.73*	286	56	1.65	1822.69	1814	16	16.4		AC-228
2	963.98	46	37	2.06	1929.29	1923	24	63.9	1.82E+00	AC-228
2	968.43*	155	33	1.62	1938.20	1923	24	21.5		AC-228
2	1119.14	22	8	2.16	2239.89	2236	14	84.7	2.03E+00	
2	1120.20	53	14	1.78	2242.00	2236	14	44.7		BI-214
0	1237.55	37	14	1.01	2476.90	2472	9	49.1		BI-214
0	1459.91*	202	24	2.63	2921.99	2912	19	18.7		K-40
0	1619.79	19	9	0.93	3241.98	3237	9	72.0		BI-212
0	1763.09*	57	16	2.89	3528.78	3521	16	42.3		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	90.03	178	189	1.02	179.52	177	13	1.65E-02	25.7	2.33E+00	
6	92.87	221	421	1.45	185.20	177	13	2.05E-02	37.9	2.43E+00	T
0	185.89	154	298	1.19	371.46	368	8	1.43E-02	44.4	3.03E+00	
3	241.08	150	245	1.32	481.96	472	29	1.39E-02	49.3	2.64E+00	
0	328.03	60	156	1.20	656.06	651	8	5.60E-03	76.3	2.11E+00	
0	772.96	28	52	2.16	1546.88	1540	10	2.62E-03	****	1.09E+00	
2	1119.14	22	8	2.16	2239.89	2236	14	2.03E-03	84.7	8.50E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.019E+00	4.017E-01	2.421E-01	1.652E-02	8.340
CS-137	1.308E-01	3.291E-02	3.042E-02	3.269E-03	4.298
TL-208	2.826E-01	4.843E-02	3.259E-02	3.270E-03	8.671
BI-212	3.587E-01	2.520E-01	2.196E-01	2.112E-02	1.634
PB-212	8.303E-01	8.499E-02	4.868E-02	3.757E-03	17.057
BI-214	4.476E-01	7.906E-02	5.079E-02	5.173E-03	8.812
PB-214	5.058E-01	8.157E-02	5.418E-02	4.275E-03	9.335
RA-223	3.695E-01	1.796E-01	1.372E-01	1.262E-02	2.694
AC-228	8.597E-01	1.491E-01	9.767E-02	5.398E-03	8.803
NP-237	3.757E-01	1.766E-01	2.585E-01	3.738E-02	1.454
AM-243	1.987E-01	6.431E-02	5.558E-02	1.166E-02	3.575

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	5.773E-03		1.674E-02	2.959E-02	1.931E-03	0.195
RH-101	-2.275E-03		1.724E-02	2.875E-02	4.459E-03	-0.079
SB-125	3.774E-02		4.224E-02	7.766E-02	6.369E-03	0.486
EU-155	1.934E-02		6.198E-02	1.070E-01	1.063E-02	0.181
PO-209	-9.770E-01		3.455E+00	5.961E+00	1.067E+00	-0.164
BI-211	3.426E-01		4.639E-01	8.769E-01	6.389E-02	0.391
PA-233	1.031E-02		2.834E-02	5.080E-02	4.266E-03	0.203
PA-234M	8.821E-01		1.939E+00	3.579E+00	2.057E-01	0.246
TH-234	1.275E+00	+	5.057E-01	6.601E-01	7.701E-02	1.932
U-235	5.240E-03		1.049E-01	1.754E-01	1.225E-02	0.030
NP-236	2.680E-02		3.532E-02	6.215E-02	6.827E-03	0.431
NP-239	-1.646E-02		1.122E-01	1.834E-01	2.474E-02	-0.090
AM-241	-6.838E-02		1.042E-01	1.771E-01	1.408E-02	-0.386
CM-243	1.292E-02		5.568E-02	9.603E-02	1.094E-02	0.135
AM-246	-5.960E-04		5.193E-02	9.245E-02	1.138E-02	-0.006
CF-249	-2.403E-03		1.849E-02	3.195E-02	3.082E-03	-0.075

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 03:10:05

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792304_GAMMA2_400MLSAN_17014.CNF

---- Sample Information ----

Sample ID	: OH207-7923-04		
Sample Title	: SB-CZ-SS-2172-ST		
Sample Quantity	: 4.70200E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17014		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 6-NOV-2007 00:09:47.
Decay time	: 43 00:09:47.16	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.45

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.10*	129	818	1.48	125.90	121	10	86.2		TH-234
1	74.79	475	584	1.08	149.16	143	21	18.3	2.37E+00	AM-243
										PB-214
										PB-212
1	77.12	747	609	1.09	153.80	143	21	13.5		PB-214
										PB-212
4	87.17*	359	713	1.45	173.81	164	27	29.5	1.95E+00	NP-237
										PB-214
										PB-212
4	90.12*	276	723	1.49	179.68	164	27	38.0		
4	92.83*	321	734	1.49	185.09	164	27	33.8		TH-234
0	128.71	178	699	0.87	256.52	252	9	55.5		AC-228
0	185.90*	347	728	1.40	370.43	365	11	32.6		
0	209.28	180	675	1.20	416.99	412	11	57.8		AC-228
3	238.78*	2047	407	1.11	475.74	471	19	5.5	2.91E+00	PB-212
3	241.29	268	374	1.42	480.74	471	19	42.1		
3	242.20	236	384	1.63	482.56	471	19	40.2		PB-214
0	270.09*	204	472	1.42	538.12	532	12	45.2		RA-223
										AC-228
0	278.10	88	391	1.50	554.08	549	10	87.6		TL-208
0	295.42*	523	351	1.17	588.57	584	11	16.5		PB-214
0	300.82	154	356	1.27	599.34	595	11	50.0		PB-212
0	327.63	136	249	1.33	652.75	649	9	44.9		
0	338.36*	396	319	1.18	674.14	668	11	20.3		AC-228
0	352.14*	852	351	1.25	701.58	696	12	11.3		PB-214
0	463.06	143	260	1.38	922.64	915	16	53.0		AC-228
0	510.93*	276	241	2.14	1018.08	1010	20	31.8		TL-208
0	583.32*	676	176	1.35	1162.42	1155	15	11.6		TL-208
0	609.39*	664	129	1.68	1214.41	1209	13	10.6		BI-214
0	661.61	151	143	1.59	1318.54	1314	11	34.5		CS-137
0	727.34	169	85	1.51	1449.67	1444	11	26.1		BI-212
0	795.48	88	77	1.44	1585.63	1580	14	48.0		AC-228
0	835.37	49	44	0.86	1665.22	1660	10	58.7		
0	860.50*	68	59	0.95	1715.37	1710	12	51.4		TL-208
0	911.08*	441	60	1.69	1816.32	1811	12	12.1		AC-228
3	964.54	115	37	2.33	1923.05	1917	21	28.9	1.28E+00	AC-228
3	968.87*	273	33	1.72	1931.70	1917	21	14.5		AC-228
0	1120.11*	164	78	2.25	2233.70	2225	21	31.4		BI-214
0	1237.56	84	35	2.64	2468.34	2462	15	37.4		BI-214
0	1376.62	42	14	2.26	2746.26	2742	10	46.2		BI-214
0	1459.79*	445	54	1.99	2912.53	2902	22	13.0		K-40
1	1586.73*	54	14	2.26	3166.41	3156	27	42.8	3.28E+00	AC-228
1	1590.73*	51	13	2.21	3174.41	3156	27	41.9		
0	1629.31	43	8	1.71	3251.59	3244	15	41.6		
0	1727.93	55	0	2.03	3448.91	3442	15	27.0		BI-214
0	1762.35*	96	6	2.14	3517.79	3511	13	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
4	90.12	276	723	1.49	179.68	164	27	2.56E-02	38.0	2.61E+00	
0	185.90	347	728	1.40	370.43	365	11	3.21E-02	32.6	3.21E+00	
3	241.29	268	374	1.42	480.74	471	19	2.48E-02	42.1	2.78E+00	
0	327.63	136	249	1.33	652.75	649	9	1.26E-02	44.9	2.20E+00	
0	835.37	49	44	0.86	1665.22	1660	10	4.52E-03	58.7	1.01E+00	
1	1590.73	51	13	2.21	3174.41	3156	27	4.76E-03	41.9	6.33E-01	
0	1629.31	43	8	1.71	3251.59	3244	15	3.94E-03	41.6	6.21E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.289E+00	4.762E-01	2.230E-01	1.436E-02	14.748
CS-137	7.785E-02	2.830E-02	2.945E-02	3.350E-03	2.644
TL-208	3.158E-01	4.920E-02	2.343E-02	2.440E-03	13.480
BI-212	6.758E-01	1.915E-01	1.810E-01	1.979E-02	3.734
PB-212	8.984E-01	8.440E-02	4.083E-02	3.120E-03	22.005
BI-214	5.893E-01	8.862E-02	4.729E-02	5.035E-03	12.463
PB-214	5.814E-01	7.939E-02	4.769E-02	3.657E-03	12.192
RA-223	3.075E-01	1.416E-01	1.280E-01	1.139E-02	2.402
AC-228	9.579E-01	1.424E-01	9.215E-02	8.008E-03	10.395
TH-234	1.169E+00	4.123E-01	3.886E-01	3.887E-02	3.008
NP-237	6.228E-01	1.998E-01	1.836E-01	2.308E-02	3.392
AM-243	1.903E-01	5.156E-02	4.436E-02	8.843E-03	4.290

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.166E-02		1.247E-02	2.061E-02	1.139E-03	-0.566
RH-101	2.364E-03		1.499E-02	2.443E-02	3.814E-03	0.097
SB-125	5.016E-02		3.925E-02	7.073E-02	5.799E-03	0.709
EU-155	1.308E-02		5.268E-02	8.879E-02	8.313E-03	0.147
PO-209	2.149E-01		2.878E+00	5.049E+00	9.681E-01	0.043
BI-211	6.613E-01		4.033E-01	7.229E-01	7.076E-02	0.915
PA-233	5.910E-03		2.603E-02	4.521E-02	3.641E-03	0.131
PA-234M	3.158E-02		1.718E+00	3.005E+00	2.346E-01	0.011
U-235	1.025E-01		9.798E-02	1.649E-01	1.204E-02	0.621
NP-236	1.450E-02		3.240E-02	5.255E-02	5.224E-03	0.276
NP-239	-6.006E-02		9.144E-02	1.548E-01	2.089E-02	-0.388
AM-241	3.915E-02		9.050E-02	1.411E-01	9.253E-03	0.278
CM-243	-2.910E-02		4.806E-02	7.869E-02	8.507E-03	-0.370
AM-246	5.137E-03		4.696E-02	8.264E-02	1.057E-02	0.062
CF-249	1.249E-02		1.665E-02	2.936E-02	2.813E-03	0.426

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:	9/27/2007	Client Project Manager:	Greg Miller
SC&A Project Manager:			
S7921 7924			

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7924-PB		9/27/2007 8:45:00 AM	
SCAQC	7924-LD1 OH207-7924-01	SB-CZ-SS-2169-SD	9/24/2007	
SCAQC	7924-LC1		9/27/2007 8:45:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7924-01	SB-CZ-SS-2169-SD	9/24/2007	
OH207	7924-02	SB-CZ-SS-2170-SD	9/24/2007	
OH207	7924-03	SB-CZ-SS-2171-SD	9/24/2007	
OH207	7924-04	SB-CZ-SS-2172-SD	9/24/2007	

Radiochemistry Reviewer 11/07/07 Date

QA Reviewer 11/07/2007 Date

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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
11-05-07 1356 G3	180	OH207	7922	13	—	9-24-07	SB-CZ-SS-2167-SD	SOIL	553.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 G1	180	OH207	7922	14	—	9-24-07	2168-SD		434.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1956 G2	180	SCAQC	7923	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1653 G3	60			LC1	—		CTRL SMP S-142	SOIL	640 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 1657 G2	180			LD1	—	9-24-07	DUP 7923-01	SOIL	484.9 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 2010 G1	180	OH207		01	—		SB-CZ-SS-2169-ST		~~479.8~~ 484.9 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-05-07 2010 G3				02	—		2170-ST		479.8 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G1 JW				03	—		2171-ST		332.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G2 JW				04	—		2172-ST		470.2 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-5-07 2310 G3 JW	480	SCAQC	7924	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐

anania1 = G1
anania2 = G2

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SCA-Form 012 Rev. 1

Page 372

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
11-6-07 1801 W2 G3	60	SCAQC	7924	LC1	—	9-27-07 0845	CTRL SAMP S-142	SOIL	640 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 0232 G1 CW	180	SCAQC	7924	LD1	—	9-24-07	DUP 7924-01	SOIL	454.9 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 0235 W2 0836 G2		OH207	7924	01	—	9-24-07	SB-CZ-SS-2169-SD		454.9 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 0836 W 0832 G2 CW	63			02	—		2170-SD		463.3 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 0232 G2 CW	62			03	—		2171-SD		317.7 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 0837 G1 W				04	—		2172-SD		493.8 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 0838 G3 W	180	SCAQC	7925	PB1	—	9-27-07 0845	PREP BLK	LIQUID	400 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 1147 W G3	60			LC1	—		CTRL SAMP S-142	SOIL	640 g	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-6-07 1147 G1 W	180			LD1	—	9-24-07	DUP 7925-01		372.5 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐
11-06-07 1148 G3 K	180	OH207		01	—	9-24-07	SB-CZ-SS-2173-ST		372.5 g dry	400 mL Liquid ☐ 20 mL Sand ☐ 400 mL Sand ☐ 1 Liter Liquid ☐ 40 mL Sand ☐ _____ ☐ 10 mL Sand ☐ 200 mL Sand ☐

Gamma1 = G1
Gamma2 = G2

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SCA-Form 012 Rev. 1

Page 373

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 03:07:58

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7924PB1_GAMMA3_400MLSA_17013.CNF

---- Sample Information ----

Sample ID	: SCAQC-7924-PB1		
Sample Title	: PREP BLK		
Sample Quantity	: 4.00000E+02 G		
Sample Type	: LIQUID		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17013		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 6-NOV-2007 00:07:44.
Decay time	: 39 15:22:44.48	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:00.56

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

Post-NID Peak Search Report
***** No peaks found *****

Interference Report

No interference correction performed

Unidentified Energy Lines

None

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	1.010E-01		1.775E-01	3.581E-01	2.107E-02	0.282
CO-60	6.206E-03		1.033E-02	2.139E-02	1.302E-03	0.290
RH-101	-4.971E-03		1.238E-02	2.062E-02	3.183E-03	-0.241
SB-125	1.119E-03		3.061E-02	5.513E-02	4.558E-03	0.020
CS-137	5.076E-03		1.152E-02	2.172E-02	1.564E-03	0.234
EU-155	-9.586E-03		3.122E-02	5.405E-02	5.082E-03	-0.177
TL-208	-2.163E-03		1.432E-02	2.574E-02	2.049E-03	-0.084
PO-209	2.773E+00		2.675E+00	5.339E+00	9.837E-01	0.519
BI-211	1.893E-01		3.522E-01	6.665E-01	4.800E-02	0.284
BI-212	6.711E-02		1.009E-01	1.906E-01	1.384E-02	0.352
PB-212	-4.360E-04		2.401E-02	4.142E-02	3.096E-03	-0.011
BI-214	2.090E-02		2.628E-02	4.966E-02	3.784E-03	0.421
PB-214	-6.215E-03		2.789E-02	4.643E-02	3.694E-03	-0.134
RA-223	1.082E-02		6.380E-02	1.108E-01	9.806E-03	0.098
AC-228	-1.446E-02		5.327E-02	9.617E-02	6.762E-03	-0.150
PA-233	-3.075E-03		2.424E-02	4.112E-02	3.356E-03	-0.075
PA-234M	-8.219E-02		1.608E+00	2.885E+00	1.970E-01	-0.028
TH-234	-4.984E-02		1.877E-01	3.476E-01	3.112E-02	-0.143
U-235	-7.345E-02		7.407E-02	1.224E-01	9.084E-03	-0.600
NP-236	-3.072E-03		1.835E-02	3.024E-02	2.885E-03	-0.102
NP-237	-6.105E-02		5.830E-02	9.107E-02	1.015E-02	-0.670
NP-239	6.796E-02		8.016E-02	1.435E-01	1.920E-02	0.474
AM-241	-9.689E-02		2.613E-02	3.472E-02	2.197E-03	-2.791
AM-243	3.759E-03		1.221E-02	2.011E-02	3.868E-03	0.187
CM-243	5.828E-04		2.808E-02	4.944E-02	5.328E-03	0.012
AM-246	-3.991E-02		5.145E-02	8.466E-02	1.069E-02	-0.471
CF-249	1.565E-02		1.464E-02	2.781E-02	2.769E-03	0.563

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-NOV-2007 19:02:17

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7924LC1_GAMMA3_400MLSA_17007.CNF

---- Sample Information ----

Sample ID	: SCAQC-7924-LC1		
Sample Title	: CTRL SAMP S-142		
Sample Quantity	: 6.40000E+02 G		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17007		

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

Collection Date	: 27-SEP-2007 08:45:00	Acquisition date	: 5-NOV-2007 18:01:54.
Decay time	: 39 09:16:54.08	% dead time	: 0.2%
Elapsed live time	: 0 01:00:00.00	Elapsed real time	: 0 01:00:05.65

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

Post-NID Peak Search Report
Sample ID : SCAQC-7924-LC1

Acquisition date : 5-NOV-2007 18:01:54

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
10	51.50	9016	14547	3.27	114.46	101	39	7.1	3.64E+02	
10	59.51	77108	5425	1.59	132.23	101	39	0.8		AM-241
0	88.06	14593	5817	1.31	195.50	188	15	2.8		
0	122.15	1696	2779	1.31	271.06	266	9	12.2		
0	136.43	229	2204	1.56	302.72	299	8	72.2		
0	238.58*	423	2442	1.27	529.14	524	10	44.8		
0	661.57	23461	1075	1.75	1466.67	1458	16	1.4		CS-137
0	1173.18	17873	608	2.01	2600.50	2591	19	1.6		CO-60
0	1332.47	16179	212	2.11	2953.49	2941	25	1.6		CO-60
0	1461.09*	35	41	1.72	3238.52	3230	15	89.2		K-40

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	9016	14547	3.27	114.46	101	39	2.50E+00	7.1	2.99E+00	
0	88.06	14593	5817	1.31	195.50	188	15	4.05E+00	2.8	3.55E+00	T
0	122.15	1696	2779	1.31	271.06	266	9	4.71E-01	12.2	3.39E+00	
0	136.43	229	2204	1.56	302.72	299	8	6.36E-02	72.2	3.26E+00	
0	238.58	423	2442	1.27	529.14	524	10	1.18E-01	44.8	2.40E+00	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	6.834E-01	6.110E-01	6.361E-01	3.743E-02	1.074
CO-60	3.238E+01	2.041E+00	1.022E-01	5.419E-03	316.910
CS-137	3.086E+01	2.267E+00	1.875E-01	1.350E-02	164.564
AM-241	7.769E+01	4.957E+00	3.284E-01	2.078E-02	236.559

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

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
RH-101	2.081E-02		8.846E-02	1.480E-01	2.285E-02	0.141
SB-125	2.216E-01		3.082E-01	5.271E-01	4.358E-02	0.420
EU-155	-1.945E-01		2.244E-01	3.767E-01	3.542E-02	-0.516
TL-208	2.543E-01		1.092E-01	1.890E-01	1.504E-02	1.346
PO-209	7.204E+00		2.989E+01	5.091E+01	9.380E+00	0.142
BI-211	-1.936E+00		3.846E+00	6.239E+00	4.493E-01	-0.310
BI-212	4.548E-01		8.696E-01	1.459E+00	1.059E-01	0.312
PB-212	4.774E-01	+	2.169E-01	2.869E-01	2.144E-02	1.664
BI-214	3.402E-01		2.070E-01	3.557E-01	2.710E-02	0.957
PB-214	3.541E-01		2.140E-01	3.565E-01	2.836E-02	0.993
RA-223	-4.057E-01		5.053E-01	8.215E-01	7.273E-02	-0.494
AC-228	2.346E-01		5.728E-01	9.779E-01	6.876E-02	0.240
PA-233	2.273E-01		1.915E-01	3.191E-01	2.604E-02	0.712
PA-234M	-4.171E+00		1.706E+01	2.866E+01	1.957E+00	-0.146
TH-234	2.976E-01		1.041E+00	1.491E+00	1.335E-01	0.200
U-235	4.416E-02		4.732E-01	8.001E-01	5.939E-02	0.055
NP-236	-5.501E-02		1.285E-01	2.057E-01	1.963E-02	-0.267
NP-237	3.116E+01		3.551E+00	1.537E+00	1.713E-01	20.275
NP-239	-7.542E-02		6.401E-01	1.060E+00	1.419E-01	-0.071
AM-243	1.329E-02		9.204E-02	1.495E-01	2.876E-02	0.089
CM-243	3.155E-01		2.069E-01	3.545E-01	3.820E-02	0.890
AM-246	1.511E-01		5.273E-01	8.919E-01	1.126E-01	0.169
CF-249	-3.083E-02		1.234E-01	2.092E-01	2.083E-02	-0.147

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 05:31:44

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_SCAQC7924LD1_GAMMA1_400MLSA_17015.CNF

---- Sample Information ----

Sample ID : SCAQC-7924-LD1
Sample Title : DUP 7924-01
Sample Quantity : 4.54900E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17015

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 6-NOV-2007 03:31:32.
Decay time : 43 03:31:32.42 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:02.54

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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: _____ Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.97	440	543	1.11	149.34	142	17	20.2	1.25E+00	AM-243
										PB-214
										PB-212
3	77.22*	647	465	0.97	153.86	142	17	13.4		PB-214
										PB-212
3	87.30	301	573	1.27	174.03	164	27	30.3	4.78E+00	NP-237
										PB-214
										PB-212
3	89.98	202	571	1.27	179.41	164	27	44.0		
3	92.97*	329	569	1.28	185.39	164	27	28.8		
0	129.10	98	519	1.06	257.74	256	7	79.7		AC-228
0	186.03*	274	570	1.23	371.74	368	9	34.6		
0	209.41	229	494	1.19	418.55	414	10	38.8		AC-228
2	238.61*	2149	295	1.05	477.03	472	17	5.0	1.54E+00	PB-212
2	241.08	270	295	1.30	481.96	472	17	34.1		
2	242.07	208	281	1.41	483.95	472	17	37.1		PB-214
0	270.11	233	363	1.27	540.10	534	12	35.2		RA-223
										AC-228
0	276.53	134	373	1.35	552.95	548	12	59.9		TL-208
0	295.10	433	297	1.24	590.13	584	11	18.1		PB-214
2	299.68	117	237	1.48	599.31	595	13	53.2	1.99E+00	
2	300.27	108	234	1.49	600.48	595	13	57.6		PB-212
0	327.97	113	273	1.11	655.94	652	9	55.9		
0	338.34*	469	267	1.17	676.72	673	11	16.4		AC-228
0	351.79*	749	211	1.29	703.65	698	10	10.4		PB-214
0	409.60	102	137	0.81	819.38	815	9	46.1		AC-228
0	462.87	177	113	0.92	926.05	922	9	26.3		AC-228
0	510.57*	248	204	1.67	1021.55	1015	15	30.8		TL-208
0	582.95*	774	132	1.46	1166.48	1160	13	9.5		TL-208
0	609.13*	559	176	1.49	1218.89	1213	13	13.1		BI-214
0	661.45	114	159	1.28	1323.64	1318	12	47.9		CS-137
0	727.01	168	124	1.41	1454.89	1447	16	33.5		BI-212
0	768.03	66	61	1.31	1537.01	1532	10	51.3		BI-214
0	794.36	105	101	1.66	1589.73	1581	15	45.9		AC-228
0	910.80*	544	80	1.78	1822.82	1816	14	11.2		AC-228
1	964.27	82	68	1.87	1929.86	1924	28	42.4	2.13E+00	AC-228
1	968.44*	239	51	1.74	1938.21	1924	28	18.2		AC-228
0	1119.89	148	56	1.55	2241.39	2233	16	28.0		BI-214
0	1459.96*	504	53	2.06	2922.09	2913	16	11.1		K-40
0	1542.42	13	14	1.32	3087.12	3082	8	112.8		
3	1587.74	52	18	2.42	3177.84	3171	27	46.5	1.39E+00	AC-228
3	1591.04	38	14	2.67	3184.45	3171	27	67.9		
0	1728.24	41	8	0.98	3459.04	3450	18	46.5		BI-214
0	1763.65*	89	14	2.00	3529.91	3522	14	28.5		BI-214
0	1847.15	28	2	1.51	3697.02	3692	10	43.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	89.98	202	571	1.27	179.41	164	27	1.87E-02	44.0	2.33E+00	
3	92.97	329	569	1.28	185.39	164	27	3.05E-02	28.8	2.43E+00	T
0	186.03	274	570	1.23	371.74	368	9	2.54E-02	34.6	3.03E+00	
2	241.08	270	295	1.30	481.96	472	17	2.50E-02	34.1	2.64E+00	
2	299.68	117	237	1.48	599.31	595	13	1.08E-02	53.2	2.26E+00	
0	327.97	113	273	1.11	655.94	652	9	1.04E-02	55.9	2.11E+00	
0	1542.42	13	14	1.32	3087.12	3082	8	1.22E-03	****	6.79E-01	
3	1591.04	38	14	2.67	3184.45	3171	27	3.56E-03	67.9	6.63E-01	
0	1847.15	28	2	1.51	3697.02	3692	10	2.56E-03	43.6	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.679E+00	4.795E-01	1.895E-01	1.293E-02	19.414
CS-137	6.105E-02	3.000E-02	2.732E-02	2.936E-03	2.234
TL-208	3.786E-01	5.241E-02	2.466E-02	2.475E-03	15.349
BI-212	6.901E-01	2.402E-01	2.079E-01	2.000E-02	3.320
PB-212	1.027E+00	9.457E-02	4.178E-02	3.225E-03	24.580
BI-214	5.179E-01	8.606E-02	5.546E-02	5.649E-03	9.338
PB-214	5.510E-01	7.178E-02	4.779E-02	3.771E-03	11.529
RA-223	3.833E-01	1.393E-01	1.258E-01	1.158E-02	3.047
AC-228	1.193E+00	1.488E-01	8.763E-02	4.843E-03	13.610
NP-237	6.088E-01	2.045E-01	2.075E-01	3.001E-02	2.934
AM-243	2.123E-01	6.186E-02	4.885E-02	1.025E-02	4.346

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	7.810E-03		1.327E-02	2.274E-02	1.484E-03	0.343
RH-101	2.417E-03		1.601E-02	2.666E-02	4.134E-03	0.091
SB-125	-4.580E-02		3.775E-02	5.995E-02	4.916E-03	-0.764
EU-155	8.072E-03		5.723E-02	9.743E-02	9.673E-03	0.083
PO-209	-6.941E-01		2.502E+00	4.322E+00	7.734E-01	-0.161
BI-211	-4.368E-01		4.140E-01	6.689E-01	4.873E-02	-0.653
PA-233	1.479E-02		2.722E-02	4.834E-02	4.060E-03	0.306
PA-234M	-7.057E-01		1.617E+00	2.726E+00	1.567E-01	-0.259
TH-234	1.385E+00	+	4.311E-01	5.910E-01	6.895E-02	2.344
U-235	1.059E-01		9.962E-02	1.707E-01	1.192E-02	0.620
NP-236	4.847E-02		3.528E-02	5.936E-02	6.521E-03	0.816
NP-239	-2.506E-02		1.019E-01	1.647E-01	2.223E-02	-0.152
AM-241	-1.197E-01		9.084E-02	1.501E-01	1.193E-02	-0.798
CM-243	1.661E-02		5.152E-02	8.829E-02	1.006E-02	0.188
AM-246	3.375E-02		4.661E-02	8.684E-02	1.069E-02	0.389
CF-249	-1.148E-02		1.691E-02	2.807E-02	2.707E-03	-0.409

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 11:36:21

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792401_GAMMA2_400MLSAN_17018.CNF

---- Sample Information ----

Sample ID	: OH207-7924-01		
Sample Title	: SB-CZ-SS-2169-SD		
Sample Quantity	: 4.54900E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17018		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 6-NOV-2007 08:36:01.
Decay time	: 43 08:36:01.78	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:01.46

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.05*	91	695	1.99	125.79	122	8	104.0		TH-234
2	74.83	455	733	1.19	149.24	144	15	21.9	1.23E+00	AM-243
										PB-214
										PB-212
2	77.06	662	514	0.91	153.68	144	15	13.0		PB-214
										PB-212
2	87.27*	264	711	1.18	174.02	163	29	35.2	1.61E+00	NP-237
										PB-214
										PB-212
2	92.85*	316	605	1.21	185.13	163	29	30.3		TH-234
0	129.21	132	747	1.18	257.52	254	9	76.5		AC-228
0	185.79*	398	677	1.49	370.20	365	11	27.8		
0	209.33	232	539	1.15	417.08	412	10	39.7		AC-228
2	236.65	127	241	1.47	471.51	469	17	39.2	2.90E+00	
2	238.76*	2172	323	1.13	475.70	469	17	5.2		PB-212
2	241.58	380	392	1.46	481.32	469	17	24.3		PB-214
0	270.31*	236	253	1.31	538.55	535	8	26.9		RA-223
										AC-228
0	295.41*	445	300	1.28	588.55	584	10	17.6		PB-214
0	300.34	168	324	1.06	598.39	594	10	42.9		PB-212
0	328.12	133	307	1.94	653.73	649	10	52.1		
0	338.51*	453	252	1.43	674.43	670	8	15.5		AC-228
0	352.18*	738	317	1.23	701.68	696	13	12.5		PB-214
0	409.63	87	178	1.31	816.16	812	9	59.3		AC-228
0	462.81	136	248	1.43	922.16	915	14	52.3		AC-228
0	511.21*	258	232	1.67	1018.63	1010	17	32.0		TL-208
0	583.34*	696	153	1.21	1162.45	1157	11	10.3		TL-208
0	609.34*	577	183	1.61	1214.31	1206	17	13.7		BI-214
0	661.66	113	135	1.72	1318.64	1313	11	44.0		CS-137
0	727.32	157	107	1.02	1449.62	1444	11	30.1		BI-212
0	795.09	75	71	1.15	1584.85	1581	8	45.6		AC-228
0	838.42	82	99	6.62	1671.32	1660	19	62.4		
0	861.27*	102	72	1.85	1716.91	1710	17	43.5		TL-208
0	911.08*	539	61	1.69	1816.32	1808	15	10.8		AC-228
3	964.51	118	37	2.28	1922.99	1915	26	28.7	1.38E+00	AC-228
3	968.92*	308	19	1.85	1931.78	1915	26	13.1		AC-228
0	1120.07*	157	43	1.59	2233.62	2225	18	25.8		BI-214
0	1237.34	48	47	0.76	2467.91	2463	12	62.6		BI-214
0	1379.25	78	45	4.45	2751.52	2738	32	57.9		BI-214
0	1459.82*	456	45	1.84	2912.60	2903	20	12.0		K-40
0	1588.96*	61	36	6.27	3170.86	3161	21	56.6		AC-228
0	1727.59	35	14	1.77	3448.23	3441	14	56.6		BI-214
0	1763.04*	85	24	2.42	3519.18	3511	17	35.7		BI-214
0	1845.48	40	3	2.67	3684.19	3677	13	36.5		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	185.79	398	677	1.49	370.20	365	11	3.68E-02	27.8	3.21E+00	
2	236.65	127	241	1.47	471.51	469	17	1.18E-02	39.2	2.82E+00	
0	328.12	133	307	1.94	653.73	649	10	1.23E-02	52.1	2.20E+00	
0	838.42	82	99	6.62	1671.32	1660	19	7.59E-03	62.4	1.01E+00	
0	1845.48	40	3	2.67	3684.19	3677	13	3.71E-03	36.5	5.62E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.489E+00	4.766E-01	2.117E-01	1.363E-02	16.482
CS-137	6.030E-02	2.738E-02	2.901E-02	3.301E-03	2.078
TL-208	3.358E-01	4.928E-02	2.721E-02	2.833E-03	12.342
BI-212	6.481E-01	2.078E-01	2.117E-01	2.314E-02	3.062
PB-212	9.849E-01	9.098E-02	4.293E-02	3.281E-03	22.940
BI-214	5.295E-01	9.209E-02	4.797E-02	5.108E-03	11.039
PB-214	5.202E-01	7.636E-02	4.849E-02	3.718E-03	10.728
RA-223	3.691E-01	1.047E-01	1.266E-01	1.127E-02	2.915
AC-228	1.209E+00	1.673E-01	8.385E-02	7.286E-03	14.422
TH-234	1.192E+00	3.809E-01	4.226E-01	4.227E-02	2.822
NP-237	4.723E-01	1.766E-01	1.997E-01	2.509E-02	2.365
AM-243	1.886E-01	5.586E-02	4.852E-02	9.672E-03	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	2.471E-03		1.335E-02	2.288E-02	1.331E-03	0.108
RH-101	-1.100E-02		1.581E-02	2.483E-02	3.876E-03	-0.443
SB-125	8.468E-03		3.769E-02	6.504E-02	5.332E-03	0.130
EU-155	6.590E-02		5.776E-02	9.923E-02	9.291E-03	0.664
PO-209	-1.776E+00		2.805E+00	4.610E+00	8.837E-01	-0.385
BI-211	-9.840E-02		4.727E-01	7.003E-01	6.855E-02	-0.141
PA-233	2.050E-02		2.696E-02	4.779E-02	3.849E-03	0.429
PA-234M	1.247E+00		1.601E+00	3.007E+00	2.347E-01	0.415
U-235	3.215E-02		9.821E-02	1.622E-01	1.184E-02	0.198
NP-236	5.172E-02		3.578E-02	5.626E-02	5.593E-03	0.919
NP-239	-1.806E-02		9.738E-02	1.680E-01	2.267E-02	-0.108
AM-241	5.495E-02		9.399E-02	1.473E-01	9.662E-03	0.373
CM-243	3.032E-02		5.142E-02	8.741E-02	9.450E-03	0.347
AM-246	2.913E-02		4.629E-02	8.569E-02	1.096E-02	0.340
CF-249	1.634E-03		1.719E-02	2.944E-02	2.821E-03	0.056

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 05:32:28

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792402_GAMMA3_400MLSAN_17016.CNF

---- Sample Information ----

Sample ID	: OH207-7924-02		
Sample Title	: SB-CZ-SS-2170-SD		
Sample Quantity	: 4.63300E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17016		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 6-NOV-2007 03:32:09.
Decay time	: 43 03:32:09.66	% dead time	: 0.0%
Elapsed live time	: 0 03:00:00.00	Elapsed real time	: 0 03:00:00.97

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA3__16287.CNF;1
Nuclide Lib File : SYS$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 Mour Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.62*	80	336	1.11	103.64	100	8	89.4		
0	63.20*	214	689	1.37	140.39	135	11	52.1		TH-234
2	74.82*	625	819	1.52	166.15	160	18	19.6	1.77E+00	AM-243
										PB-214
										PB-212
2	77.18*	983	796	1.46	171.39	160	18	13.0		PB-214
										PB-212
0	87.21	268	1057	1.25	193.63	187	11	48.7		NP-237
										PB-214
										PB-212
2	89.98	201	385	1.10	199.76	197	14	32.2	8.47E-01	
2	92.82*	290	741	1.50	206.06	197	14	40.1		TH-234
0	128.93	127	763	1.23	286.10	279	12	88.9		AC-228
0	185.84*	315	660	1.38	412.24	404	15	38.3		
0	209.69	151	459	1.17	465.10	458	11	57.2		AC-228
3	238.72*	1571	351	1.45	529.45	522	20	7.0	1.25E+00	PB-212
3	241.70	372	376	1.85	536.05	522	20	28.4		PB-214
0	270.20	164	246	1.84	599.23	595	11	40.1		RA-223
										AC-228
1	295.27	440	221	1.56	654.79	649	22	15.8	2.73E+00	PB-214
1	300.17	102	251	1.74	665.65	649	22	59.5		PB-212
0	328.26	186	245	1.69	727.93	721	15	39.6		
0	338.40*	370	268	1.58	750.39	742	14	21.5		AC-228
0	352.07*	716	233	1.43	780.70	774	13	11.6		PB-214
0	463.09	91	131	2.16	1026.76	1021	11	53.5		AC-228
0	511.19*	248	220	2.08	1133.37	1124	22	36.2		TL-208
0	583.26*	513	155	1.72	1293.10	1285	19	14.7		TL-208
0	609.41*	553	138	1.74	1351.06	1343	19	13.4		BI-214
0	661.62	340	109	1.58	1466.78	1459	14	16.9		CS-137
0	727.28	122	104	1.86	1612.29	1606	17	41.9		BI-212
0	795.24	51	77	1.56	1762.91	1757	12	75.1		AC-228
0	861.36	59	81	1.81	1909.46	1902	18	77.5		TL-208
0	911.17*	368	52	1.59	2019.85	2010	19	14.3		AC-228
0	934.34	31	51	1.20	2071.19	2063	13	103.0		BI-214
0	969.93	119	104	1.83	2150.07	2142	17	44.9		AC-228
0	1120.29*	134	56	2.03	2483.28	2473	19	32.3		BI-214
0	1281.09	34	8	1.22	2839.63	2834	14	51.6		BI-214
0	1460.74*	291	6	2.42	3237.74	3226	19	12.9		K-40
0	1729.33	18	12	1.39	3832.90	3828	11	84.1		BI-214
0	1764.86*	86	10	2.05	3911.64	3903	20	29.1		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	46.62	80	336	1.11	103.64	100	8	7.42E-03	89.4	2.77E+00	
2	89.98	201	385	1.10	199.76	197	14	1.86E-02	32.2	3.55E+00	
0	185.84	315	660	1.38	412.24	404	15	2.92E-02	38.3	2.82E+00	
0	328.26	186	245	1.69	727.93	721	15	1.73E-02	39.6	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.644E+00	3.748E-01	2.549E-01	1.500E-02	10.373
CS-137	2.060E-01	3.790E-02	3.078E-02	2.216E-03	6.691
TL-208	2.803E-01	4.685E-02	2.592E-02	2.063E-03	10.813
BI-212	5.785E-01	2.462E-01	2.161E-01	1.568E-02	2.678
PB-212	8.154E-01	8.324E-02	4.709E-02	3.520E-03	17.316
BI-214	5.753E-01	8.868E-02	5.410E-02	4.122E-03	10.634
PB-214	5.746E-01	8.099E-02	5.652E-02	4.496E-03	10.166
RA-223	2.937E-01	1.206E-01	1.418E-01	1.255E-02	2.072
AC-228	9.585E-01	1.523E-01	1.005E-01	7.067E-03	9.536
TH-234	8.163E-01	3.353E-01	3.407E-01	3.050E-02	2.396
NP-237	3.287E-01	1.643E-01	1.650E-01	1.839E-02	1.992
AM-243	1.416E-01	3.884E-02	2.860E-02	5.500E-03	4.950

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.303E-02		1.690E-02	2.519E-02	1.336E-03	0.517
RH-101	-6.445E-03		1.763E-02	2.935E-02	4.529E-03	-0.220
SB-125	1.601E-03		4.299E-02	7.529E-02	6.224E-03	0.021
EU-155	3.752E-02		4.895E-02	8.592E-02	8.079E-03	0.437
PO-209	-4.561E+00		3.220E+00	4.873E+00	8.978E-01	-0.936
BI-211	-5.222E-01		5.094E-01	8.000E-01	5.761E-02	-0.653
PA-233	2.787E-03		3.156E-02	5.325E-02	4.345E-03	0.052
PA-234M	4.498E-01		1.834E+00	3.320E+00	2.267E-01	0.135
U-235	3.888E-02		1.024E-01	1.767E-01	1.312E-02	0.220
NP-236	3.098E-02		2.988E-02	4.844E-02	4.623E-03	0.640
NP-239	2.226E-02		1.148E-01	1.951E-01	2.610E-02	0.114
AM-241	2.482E-02		3.680E-02	5.469E-02	3.461E-03	0.454
CM-243	-8.600E-03		4.421E-02	7.587E-02	8.176E-03	-0.113
AM-246	3.187E-02		5.315E-02	1.003E-01	1.265E-02	0.318
CF-249	9.832E-03		1.912E-02	3.416E-02	3.402E-03	0.288

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 05:33:04

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792403_GAMMA2_400MLSAN_17017.CNF

---- Sample Information ----

Sample ID : OH207-7924-03
Sample Title : SB-CZ-SS-2171-SD
Sample Quantity : 3.17700E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17017

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

Collection Date : 24-SEP-2007 00:00:00 Acquisition date : 6-NOV-2007 03:32:55.
Decay time : 43 03:32:55.22 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:00.94

---- 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA2__16286.CNF;1
Nuclide Lib File : SYS$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 Wood Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.73	242	369	1.01	149.05	144	14	28.0	1.05E+00	AM-243
										PB-214
										PB-212
3	77.03	402	344	0.98	153.63	144	14	17.8		PB-214
										PB-212
4	87.40*	221	331	1.30	174.27	164	27	32.5	3.22E+00	NP-237
										PB-214
										PB-212
4	92.74*	236	350	1.49	184.91	164	27	34.4		
0	128.74	94	358	1.16	256.59	253	8	72.9		AC-228
0	186.02*	110	472	1.21	370.65	364	13	86.0		
0	209.08	140	327	0.88	416.58	412	10	51.1		AC-228
0	238.66*	923	479	1.02	475.49	469	11	11.5		PB-212
0	241.66	111	205	2.14	481.49	480	6	46.8		PB-214
0	270.39*	88	197	1.35	538.72	534	10	64.5		RA-223
										AC-228
0	295.39*	137	248	1.41	588.52	582	12	49.8		PB-214
0	338.45*	203	162	1.46	674.31	670	9	27.1		AC-228
0	352.03*	231	143	1.17	701.38	696	10	24.2		PB-214
0	463.39	124	71	0.92	923.31	919	10	31.4		AC-228
0	511.33*	127	128	2.23	1018.87	1012	16	50.1		TL-208
0	583.50*	303	130	1.42	1162.77	1158	13	19.6		TL-208
0	609.66*	147	90	1.21	1214.95	1209	11	31.2		
0	661.61	38	58	0.99	1318.54	1313	10	80.8		CS-137
0	727.13	73	73	0.67	1449.25	1442	16	57.3		BI-212
0	795.24	49	33	0.90	1585.13	1581	14	54.6		AC-228
0	860.82*	48	52	1.14	1716.00	1709	14	71.7		TL-208
0	911.13*	234	33	1.74	1816.43	1808	14	17.0		AC-228
1	964.42	60	44	1.93	1922.81	1917	21	46.6	1.76E+00	AC-228
1	968.70*	141	27	1.68	1931.35	1917	21	22.5		AC-228
0	1459.84*	75	15	1.57	2912.63	2906	16	36.2		K-40
0	1763.01*	25	20	1.13	3519.10	3514	11	87.9		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	92.74	236	350	1.49	184.91	164	27	2.19E-02	34.4	2.70E+00	T
0	186.02	110	472	1.21	370.65	364	13	1.02E-02	86.0	3.21E+00	
0	609.66	147	90	1.21	1214.95	1209	11	1.36E-02	31.2	1.30E+00	T
0	1763.01	25	20	1.13	3519.10	3514	11	2.31E-03	87.9	5.84E-01	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	8.163E-01	3.004E-01	2.451E-01	1.578E-02	3.330
CS-137	2.923E-02	2.386E-02	3.182E-02	3.620E-03	0.919
TL-208	2.092E-01	4.637E-02	3.276E-02	3.412E-03	6.385
BI-212	4.299E-01	2.509E-01	2.217E-01	2.423E-02	1.939
PB-212	5.993E-01	8.279E-02	5.417E-02	4.139E-03	11.064
PB-214	2.334E-01	5.923E-02	5.591E-02	4.287E-03	4.175
RA-223	1.966E-01	1.280E-01	1.326E-01	1.179E-02	1.483
AC-228	7.503E-01	1.433E-01	1.104E-01	9.589E-03	6.799
NP-237	5.675E-01	1.978E-01	2.082E-01	2.616E-02	2.726
AM-243	1.433E-01	4.924E-02	5.319E-02	1.060E-02	2.694

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.969E-03		1.454E-02	2.070E-02	1.204E-03	-0.095
RH-101	-5.348E-04		1.749E-02	2.850E-02	4.449E-03	-0.019
SB-125	-1.839E-02		4.523E-02	7.554E-02	6.193E-03	-0.243
EU-155	1.718E-02		5.900E-02	1.007E-01	9.426E-03	0.171
PO-209	-9.146E-02		3.360E+00	5.946E+00	1.140E+00	-0.015
BI-211	-2.408E-01		4.408E-01	7.431E-01	7.274E-02	-0.324
BI-214	1.925E-01	+	6.355E-02	9.907E-02	1.055E-02	1.943
PA-233	2.307E-02		3.078E-02	5.545E-02	4.466E-03	0.416
PA-234M	9.172E-01		1.972E+00	3.690E+00	2.880E-01	0.249
TH-234	1.276E+00	+	4.576E-01	6.376E-01	6.377E-02	2.001
U-235	6.648E-02		1.090E-01	1.831E-01	1.336E-02	0.363
NP-236	5.349E-02		3.516E-02	6.017E-02	5.981E-03	0.889
NP-239	-7.365E-02		1.049E-01	1.775E-01	2.395E-02	-0.415
AM-241	-9.621E-02		9.543E-02	1.575E-01	1.033E-02	-0.611
CM-243	1.232E-02		5.287E-02	9.017E-02	9.748E-03	0.137
AM-246	-6.823E-03		4.978E-02	8.763E-02	1.121E-02	-0.078
CF-249	6.097E-03		1.860E-02	3.279E-02	3.141E-03	0.186

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-NOV-2007 11:38:04

Configuration :
SYS$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]SMP_OH207792404_GAMMA1_400MLSAN_17019.CNF

---- Sample Information ----

Sample ID	: OH207-7924-04		
Sample Title	: SB-CZ-SS-2172-SD		
Sample Quantity	: 4.93800E+02 GDRY		
Sample Type	: SOIL		
Sample Geometry	: 400 ml sand		
Sample Seq No.	: 17019		

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

Collection Date	: 24-SEP-2007 00:00:00	Acquisition date	: 6-NOV-2007 08:37:44.
Decay time	: 43 08:37:44.89	% 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:

Eff = exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5

where:
x=ln(a1/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$SYSDEVICE:[GAMMA.SCUSR.ARCHIVE]BKG_LNGBKG100507_GAMMA1__16285.CNF;1
Nuclide Lib File : SYS$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 Z Moore Date: 11/07/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	75.02	402	572	1.21	149.45	143	14	22.4	1.63E+00	AM-243 PB-214 PB-212
3	77.22*	570	495	0.93	153.86	143	14	15.2		PB-214 PB-212
0	87.06	222	632	1.21	173.56	171	7	39.7		NP-237 PB-214 PB-212
0	89.95	160	507	1.22	179.34	177	6	47.2		
0	93.02*	231	686	1.29	185.49	182	8	42.9		
0	153.94	97	576	1.03	307.49	304	9	91.0		
0	186.01*	262	655	1.26	371.69	367	10	39.5		
0	209.65	194	494	1.07	419.03	415	9	44.2		AC-228
3	238.63*	1963	314	1.05	477.06	472	19	5.4	1.48E+00	PB-212
3	240.88	202	323	1.29	481.56	472	19	45.6		
3	241.92	237	309	1.27	483.65	472	19	32.7		PB-214
0	270.03	212	360	1.07	539.93	535	11	37.1		RA-223 AC-228
7	276.23	30	164	1.17	552.36	550	9	136.4	5.51E+00	
7	277.49	90	252	1.35	554.88	550	9	65.3		TL-208
0	295.16	497	386	1.10	590.26	584	11	17.7		PB-214
0	300.11	134	265	1.19	600.17	596	9	47.1		PB-212
0	327.67	161	326	1.18	655.35	649	13	48.7		
0	338.29*	513	314	1.26	676.61	671	13	16.8		AC-228
0	351.83*	863	205	1.30	703.72	699	9	9.1		PB-214
0	462.94	120	210	1.55	926.18	920	12	52.3		AC-228
0	510.59*	227	228	1.75	1021.59	1015	15	34.7		TL-208
0	583.05*	673	138	1.40	1166.67	1161	12	10.5		TL-208
0	609.09*	676	124	1.57	1218.80	1213	13	10.5		BI-214
0	661.42	205	96	1.38	1323.57	1317	12	23.7		CS-137
0	727.15	167	118	1.69	1455.17	1448	14	31.8		BI-212
0	768.07	47	75	1.79	1537.08	1533	9	72.9		BI-214
0	795.02	90	103	1.94	1591.05	1584	15	54.4		AC-228
0	860.48	71	94	1.49	1722.09	1713	17	67.3		TL-208
0	910.82*	436	120	1.61	1822.87	1815	15	14.7		AC-228
0	930.78	23	27	1.43	1862.83	1857	9	91.5		
0	933.68	57	13	1.43	1868.63	1865	8	34.8		BI-214
4	964.28	48	67	1.87	1929.89	1926	21	59.1	1.28E+00	AC-228
4	968.60*	290	73	2.04	1938.54	1926	21	17.1		AC-228
0	1119.41	143	55	1.70	2240.43	2232	16	28.8		BI-214
0	1238.26	66	60	1.77	2478.33	2472	16	57.7		BI-214
0	1377.14	61	25	1.90	2756.31	2750	14	42.8		BI-214
0	1460.07*	474	36	2.41	2922.31	2916	14	10.8		K-40
0	1589.82	77	40	7.11	3182.00	3169	24	49.7		AC-228
0	1728.37	48	4	1.41	3459.29	3452	14	33.1		BI-214
0	1763.63*	122	16	2.59	3529.86	3522	16	23.9		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	89.95	160	507	1.22	179.34	177	6	1.48E-02	47.2	2.33E+00	
0	93.02	231	686	1.29	185.49	182	8	2.14E-02	42.9	2.43E+00	T
0	153.94	97	576	1.03	307.49	304	9	9.02E-03	91.0	3.17E+00	
0	186.01	262	655	1.26	371.69	367	10	2.43E-02	39.5	3.03E+00	
3	240.88	202	323	1.29	481.56	472	19	1.87E-02	45.6	2.64E+00	
7	276.23	30	164	1.17	552.36	550	9	2.77E-03	****	2.40E+00	
0	327.67	161	326	1.18	655.35	649	13	1.49E-02	48.7	2.11E+00	
0	930.78	23	27	1.43	1862.83	1857	9	2.13E-03	91.5	9.59E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.185E+00	4.059E-01	2.076E-01	1.417E-02	15.340
CS-137	1.009E-01	2.624E-02	2.641E-02	2.838E-03	3.822
TL-208	3.031E-01	4.412E-02	2.316E-02	2.325E-03	13.083
BI-212	6.320E-01	2.097E-01	1.773E-01	1.706E-02	3.564
PB-212	8.643E-01	8.127E-02	3.908E-02	3.016E-03	22.119
BI-214	5.764E-01	8.423E-02	4.456E-02	4.539E-03	12.936
PB-214	5.842E-01	7.051E-02	4.457E-02	3.517E-03	13.110
RA-223	3.212E-01	1.229E-01	1.148E-01	1.057E-02	2.797
AC-228	8.799E-01	1.382E-01	8.132E-02	4.494E-03	10.821
NP-237	4.142E-01	1.750E-01	2.164E-01	3.130E-02	1.914
AM-243	1.787E-01	5.479E-02	4.769E-02	1.001E-02	3.747

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

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.213E-03		1.181E-02	2.036E-02	1.329E-03	0.158
RH-101	-3.944E-03		1.438E-02	2.360E-02	3.660E-03	-0.167
SB-125	1.463E-02		3.453E-02	6.082E-02	4.988E-03	0.240
EU-155	6.498E-02		5.264E-02	9.204E-02	9.138E-03	0.706
PO-209	1.993E+00		2.267E+00	4.287E+00	7.672E-01	0.465
BI-211	9.670E-03		4.133E-01	7.249E-01	5.281E-02	0.013
PA-233	7.788E-03		2.441E-02	4.304E-02	3.614E-03	0.181
PA-234M	7.256E-02		1.429E+00	2.523E+00	1.450E-01	0.029
TH-234	8.955E-01	+	3.979E-01	5.301E-01	6.185E-02	1.689
U-235	5.122E-02		9.031E-02	1.527E-01	1.066E-02	0.335
NP-236	2.673E-02		3.090E-02	5.371E-02	5.901E-03	0.498
NP-239	1.099E-02		9.191E-02	1.510E-01	2.038E-02	0.073
AM-241	-5.560E-02		8.114E-02	1.377E-01	1.095E-02	-0.404
CM-243	-3.360E-03		4.771E-02	8.076E-02	9.204E-03	-0.042
AM-246	3.122E-02		4.250E-02	7.936E-02	9.767E-03	0.393
CF-249	-4.894E-03		1.568E-02	2.658E-02	2.564E-03	-0.184

COUNTING RAW DATA

GPL Laboratories, LLLP
Frederick, MD

GPL Laboratories, LLLP

Analysis Run Log

Project: 710030 Instrument: P3050

Data File Name: 071015.ARC

Sample Name	Client ID	Analysis Date	Analysis Time
STD0		10/15/07	11:09 AM
STD1		10/15/07	11:19 AM
STD2		10/15/07	11:28 AM
STD3		10/15/07	11:38 AM
STD4		10/15/07	11:44 AM
IVICV		10/15/07	11:50 AM
IBICB		10/15/07	11:59 AM
CVCCV1		10/15/07	12:09 PM
BCCCB1		10/15/07	12:18 PM
PQL		10/15/07	12:28 PM
IAICSAI		10/15/07	12:37 PM
IBICSABI		10/15/07	12:46 PM
CVCCV2		10/15/07	1:11 PM
BCCCB2		10/15/07	1:20 PM
BLK100842	BLK100842	10/15/07	1:30 PM
BKS100842	BKS100842	10/15/07	1:39 PM
S 710030-001-001-1/1	SB-CZ-SS-2155-ST	10/15/07	1:49 PM
SP710030-001-001-1/1	SB-CZ-SS-2155-ST MS	10/15/07	1:58 PM
SD710030-001-001-1/1	SB-CZ-SS-2155-ST MSD	10/15/07	2:07 PM
SE710030-001-001-1/1	SB-CZ-SS-2155-ST	10/15/07	2:26 PM
S 710030-002-002-1/1	SB-CZ-SS-2156-ST	10/15/07	2:35 PM
S 710030-003-003-1/1	SB-CZ-SS-2157-ST	10/15/07	2:45 PM
S 710030-004-004-1/1	SB-CZ-SS-2158-ST	10/15/07	2:54 PM
CVCCV3		10/15/07	3:06 PM
BCCCB3		10/15/07	3:15 PM
S 710030-005-005-1/1	SB-CZ-SS-2159-ST	10/15/07	3:25 PM
S 710030-006-006-1/1	SB-CZ-SS-2160-ST	10/15/07	3:34 PM
S 710030-007-007-1/1	SB-CZ-SS-2161-ST	10/15/07	3:43 PM
S 710030-008-008-1/1	SB-CZ-SS-2162-ST	10/15/07	3:53 PM
S 710030-009-009-1/1	SB-CZ-SS-2163-ST	10/15/07	4:02 PM
S 710030-010-010-1/1	SB-CZ-SS-2164-ST	10/15/07	4:12 PM
S 710030-011-011-1/1	SB-CZ-SS-2165-ST	10/15/07	4:21 PM
S 710030-012-012-1/1	SB-CZ-SS-2166-ST	10/15/07	4:30 PM
S 710030-014-014-1/1	SB-CZ-SS-2167-ST	10/15/07	4:39 PM
S 710030-015-015-1/1	SB-CZ-SS-2168-ST	10/15/07	4:49 PM
CVCCV4		10/15/07	5:01 PM
BCCCB4		10/15/07	5:11 PM
S 710030-016-016-1/1	SB-CZ-SS-2155-SD	10/15/07	5:20 PM
S 710030-017-017-1/1	SB-CZ-SS-2156-SD	10/15/07	5:29 PM

GPL Laboratories, LLLP

Analysis Run Log

Project: 710030 Instrument: P3050

Data File Name: 071015.ARC

Sample Name	Client ID	Analysis Date	Analysis Time
S 710030-018-018-1/1	SB-CZ-SS-2157-SD	10/15/07	5:39 PM
S 710030-019-019-1/1	SB-CZ-SS-2158-SD	10/15/07	5:48 PM
S 710030-020-020-1/1	SB-CZ-SS-2159-SD	10/15/07	5:58 PM
S 710030-021-021-1/1	SB-CZ-SS-2160-SD	10/15/07	6:07 PM
BLK100777	BLK100777	10/15/07	6:19 PM
BKS100777	BKS100777	10/15/07	6:28 PM
CVCCV5		10/15/07	6:41 PM
BCCCB5		10/15/07	6:50 PM
S 710030-022-022-1/1	SB-CZ-SS-2161-SD	10/15/07	7:00 PM
SP710030-022-022-1/1	SB-CZ-SS-2161-SD MS	10/15/07	7:09 PM
SD710030-022-022-1/1	SB-CZ-SS-2161-SD MSD	10/15/07	7:18 PM
SE710030-022-022-1/1	SB-CZ-SS-2161-SD	10/15/07	7:37 PM
S 710030-023-023-1/1	SB-CZ-SS-2162-SD	10/15/07	7:46 PM
S 710030-024-024-1/1	SB-CZ-SS-2163-SD	10/15/07	7:56 PM
S 710030-025-025-1/1	SB-CZ-SS-2164-SD	10/15/07	8:05 PM
CVCCV6		10/15/07	8:36 PM
BCCCB6		10/15/07	8:45 PM
S 710030-026-026-1/1	SB-CZ-SS-2165-SD	10/15/07	8:55 PM
S 710030-027-027-1/1	SB-CZ-SS-2166-SD	10/15/07	9:04 PM
S 710030-028-028-1/1	SB-CZ-SS-2167-SD	10/15/07	9:14 PM
S 710030-029-029-1/1	SB-CZ-SS-2168-SD	10/15/07	9:23 PM
S 710030-030-030-1/1	SB-CZ-SS-2169-ST	10/15/07	9:32 PM
S 710030-031-031-1/1	SB-CZ-SS-2170-ST	10/15/07	9:42 PM
S 710030-032-032-1/1	SB-CZ-SS-2171-ST	10/15/07	9:51 PM
S 710030-033-033-1/1	SB-CZ-SS-2172-ST	10/15/07	10:00 PM
S 710030-034-034-1/1	SB-CZ-SS-2169-SD	10/15/07	10:10 PM
S 710030-035-035-1/1	SB-CZ-SS-2170-SD	10/15/07	10:19 PM
CVCCV7		10/15/07	10:31 PM
BCCCB7		10/15/07	10:41 PM
S 710030-036-036-1/1	SB-CZ-SS-2171-SD	10/15/07	10:50 PM
S 710030-037-037-1/1	SB-CZ-SS-2172-SD	10/15/07	11:00 PM
CVCCV8		10/16/07	12:30 AM
BCCCB8		10/16/07	12:39 AM

GPL Laboratories, LLLP

ICP ANALYSIS LOG

Document Control No: GP_M_178

Instrument ID: Trace (424690) Inst. Method: Trace1 Nebulizer: Conical Analytical Batch No: 07/0 Af

Profile: 0.016 Af Intensity: 7.3 Af Setting: 437

Workorder	Project/SDG #	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Comments / Dilution
7/0030	SC&A	100842	175	S	10.8.07	60/0C	Pb only 10x all
7/0930		100777	176	↓	↓	↓	↓
7/0047	EdenSpace	100869	181	↓	10.9.07	60/0S	AS only rerun 12, 13, 14

67 of 152

Re: 16/Oct/2007

Source Solution Numbers

Stds.	Number	Stds.	Number
S0	129-116-04	ICV	41804
S1	41930	CCV	41821
S2	41931	ICSA	41947
S3	41944	ICSAB	41948
S4	41816	CRI	—
S5	—	Low Ck	41820
Ints	41934	LR	41613

Post Digestion Spikes

Spike 9.9 mls of sample with 0.1 mls of 41613

Samples:

7/0030- 001 001 1/1

022- 022 1/1

7/0047 001 001 1/1

Analyst: KO Date: 16/Oct/2007 Reviewed: RN Date: 10-16-07

Supersedes GP_M_165

ICP ANALYSIS LOG

GPL - Maryland Laboratory

ICPST Analysis Log

Seq	Sample Name	Dil	Date	Time
1	STD0	1	10/15/2007	11:00
2	STD1	1	10/15/2007	11:10
3	STD2	1	10/15/2007	11:20
4	STD3	1	10/15/2007	11:30
5	STD4	1	10/15/2007	11:44
6	ICV	1	10/15/2007	11:50
7	BICB	1	10/15/2007	11:59
8	CVCCV	K	10/15/2007	12:09
9	BCCCB	1	10/15/2007	12:19
10	PQL	AS	10/15/2007	12:29
11	MICSAI	Mn, Zn	10/15/2007	12:37
12	BICSABI	1	10/15/2007	12:49
13	LR	1	10/15/2007	12:58
14	CVCCV3	K	10/15/2007	13:11
15	BCCCB3	1	10/15/2007	13:20
16	BLK100842	1	10/15/2007	13:30
17	BKS100842	1	10/15/2007	13:39
18	S 710030-001-001-1/1	1	10/15/2007	13:49
19	SP710030-001-001-1/	1	10/15/2007	13:58
20	SD710030-001-001-1/	1	10/15/2007	14:07
21	PS710030-001-001-1/	1	10/15/2007	14:17
22	SE710030-001-001-1/	1	10/15/2007	14:26
23	S 710030-002-002-1/1	1	10/15/2007	14:35
24	S 710030-003-003-1/1	1	10/15/2007	14:45
25	S 710030-004-004-1/1	1	10/15/2007	14:54
26	CVCCV4	K	10/15/2007	15:05
27	BCCCB4	1	10/15/2007	15:15
28	S 710030-005-005-1/1	1	10/15/2007	15:25
29	S 710030-006-006-1/1	1	10/15/2007	15:34
30	S 710030-007-007-1/1	1	10/15/2007	15:43
31	S 710030-008-008-1/1	1	10/15/2007	15:53
32	S 710030-009-009-1/1	1	10/15/2007	16:02
33	S 710030-010-010-1/1	1	10/15/2007	16:12
34	S 710030-011-011-1/1	1	10/15/2007	16:21
35	S 710030-012-012-1/1	1	10/15/2007	16:30
36	S 710030-014-014-1/1	1	10/15/2007	16:39
37	S 710030-016-015-1/1	1	10/15/2007	16:49
38	CVCCV3	K	10/15/2007	17:01
39	BCCCB3	1	10/15/2007	17:11
40	S 710030-016-016-1/1	1	10/15/2007	17:20
41	S 710030-017-017-1/1	1	10/15/2007	17:29
42	S 710030-018-018-1/1	1	10/15/2007	17:39
43	S 710030-019-019-1/1	1	10/15/2007	17:48
44	S 710030-020-020-1/1	1	10/15/2007	17:58
45	S 710030-021-021-1/1	1	10/15/2007	18:07
46	BLK100777	1	10/15/2007	18:19
47	BKS100777	1	10/15/2007	18:28
48	CVCCV3	K	10/15/2007	18:41
49	BCCCB3	1	10/15/2007	18:50
50	S 710030-022-022-1/1	1	10/15/2007	19:00
51	SP710030-022-022-1/	1	10/15/2007	19:09
52	SD710030-022-022-1/	1	10/15/2007	19:18
53	PS710030-022-022-1/	1	10/15/2007	19:28
54	SE710030-022-022-1/	1	10/15/2007	19:37
55	S 710030-023-023-1/1	1	10/15/2007	19:46
56	S 710030-024-024-1/1	1	10/15/2007	19:56
57	S 710030-025-025-1/1	1	10/15/2007	20:05
58	MICSAI	Mn, Zn	10/15/2007	20:18
59	BICSABI	1	10/15/2007	20:27
60	CVCCV3	K	10/15/2007	20:36
61	BCCCB3	1	10/15/2007	20:45
62	S 710030-026-026-1/1	1	10/15/2007	20:55
63	S 710030-027-027-1/1	1	10/15/2007	21:04
64	S 710030-028-028-1/1	1	10/15/2007	21:14
65	S 710030-029-029-1/1	1	10/15/2007	21:23
66	S 710030-030-030-1/1	1	10/15/2007	21:32
67	S 710030-031-031-1/1	1	10/15/2007	21:42
68	S 710030-032-032-1/1	1	10/15/2007	21:51
69	S 710030-033-033-1/1	1	10/15/2007	22:00
70	S 710030-034-034-1/1	1	10/15/2007	22:10
71	S 710030-035-035-1/1	1	10/15/2007	22:19
72	CVCCV4	K	10/15/2007	22:31
73	BCCCB4	1	10/15/2007	22:41
74	S 710030-036-036-1/1	1	10/15/2007	22:50
75	S 710030-037-037-1/1	1	10/15/2007	23:00
76	BLK 101	1	10/15/2007	23:12
77	BKS 101	1	10/15/2007	23:22
78	S 710047-001-001-1/1	1	10/15/2007	23:31
79	SP710047-001-001-1/	1	10/15/2007	23:40
80	SD710047-001-001-1/	1	10/15/2007	23:49
81	PS710047-001-001-1/	1	10/16/2007	23:58
82	SE710047-001-001-1/	1	10/16/2007	0:08
83	S 710047-002-002-1/1	1	10/16/2007	0:16
84	CVCCV4	K	10/16/2007	0:30
85	BCCCB4	1	10/16/2007	0:39
86	S 710047-003-003-1/1	1	10/16/2007	0:49
87	S 710047-004-004-1/1	1	10/16/2007	0:58
88	S 710047-005-005-1/1	1	10/16/2007	1:07
89	S 710047-006-006-1/1	1	10/16/2007	1:16
90	S 710047-007-007-1/1	1	10/16/2007	1:26
91	S 710047-008-008-1/1	1	10/16/2007	1:35
92	S 710047-009-009-1/1	1	10/16/2007	1:45
93	S 710047-010-010-1/1	1	10/16/2007	1:54
94	S 710047-011-011-1/1	1	10/16/2007	2:03
95	CVCCV5	K	10/16/2007	2:16
96	BCCCB5	1	10/16/2007	2:25
97	S 710047-012-012-1/1	1	10/16/2007	2:35
98	S 710047-013-013-1/1	1	10/16/2007	2:44
99	S 710047-014-014-1/1	1	10/16/2007	2:53
100	MICSAI	Mn, Zn	10/16/2007	3:06
101	BICSABI	1	10/16/2007	3:16
102	CVCCV6	K	10/16/2007	3:26

Analyst Signature: KC Date: 10/16/2007 Analyst Signature:

Sample Dilutions:

Method: TRACE1 Standard: STD0
Run Time: 10/15/07 11:09:54

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	.02330	.00490	.00116	.00576	-.00630	-.00132	.08351
#1	.02358	.00564	.00113	.00593	-.00638	-.00137	.08359
#2	.02302	.00415	.00119	.00558	-.00622	-.00127	.08342

Elem	CR	CO	CU	FE	MG	MN	NI
Avge	.00103	-.00102	.03109	.00244	-.00011	.00069	-.01151
#1	.00108	-.00026	.03072	.00214	.00000	.00076	-.01034
#2	.00098	-.00177	.03147	.00275	-.00021	.00061	-.01268

Elem	K	AG	NA	TL	V	ZN	B
Avge	-.00040	.00206	-.00209	-.00439	-.00007	.00030	.00146
#1	.00335	.00177	-.00177	-.00398	.00000	.00024	.00232
#2	-.00415	.00236	-.00241	-.00479	-.00013	.00037	.00061

Elem	MO	SN	SR	TI	1/PB	2/PB	1/SE
Avge	.00051	.00073	.00629	.00065	-.00841	.00226	-.01389
#1	.00111	.00145	.00643	.00029	-.01218	.00338	-.01775
#2	-.00008	.00000	.00614	.00101	-.00463	.00114	-.01003

Elem	2/SE	TE	ZR	SI
Avge	.01165	-.02465	3.9591	.07442
#1	.01047	-.02526	3.9641	.07481
#2	.01284	-.02403	3.9541	.07402

Method: TRACE1 Standard: STD1
Run Time: 10/15/07 11:19:12

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	5.8507	.41259	.33043	2.6885	.11011	2.4102	.71405
#1	5.8507	.41170	.32848	2.6851	.11050	2.4095	.71467
#2	5.8507	.41348	.33237	2.6919	.10972	2.4109	.71344

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	.79213	.95440	6.2714	1.1667	1.1988	.49758	.17384
#1	.79215	.95745	6.2757	1.1675	1.1974	.49920	.17341
#2	.79211	.95135	6.2672	1.1658	1.2003	.49597	.17426

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.19368	.35530	.68293	.48170	.41159	3.3021	1.6079
#1	.19411	.35682	.68342	.48053	.41056	3.3009	1.6116
#2	.19325	.35378	.68244	.48286	.41262	3.3033	1.6042

Elem	1/PB	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	1.0578	1.2912	.34398	.72678	.46487	4.5546	.32727
#1	1.0595	1.2868	.34418	.72622	.46259	4.5665	.32634
#2	1.0561	1.2957	.34377	.72734	.46715	4.5426	.32819

Method: TRACE1 Standard: STD2
Run Time: 10/15/07 11:28:50

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	11.652	.81456	.66506	5.4024	.22757	4.8142	1.4303
#1	11.656	.81507	.66429	5.4073	.22735	4.8211	1.4308
#2	11.648	.81405	.66582	5.3975	.22779	4.8073	1.4297

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	1.5888	1.8800	12.577	2.3394	2.4196	.99911	.35048
#1	1.5890	1.8781	12.586	2.3410	2.4211	.99715	.35002
#2	1.5886	1.8819	12.567	2.3378	2.4181	1.0011	.35094

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.38945	.71421	1.3588	.97119	.82712	6.5684	3.2188
#1	.38887	.71337	1.3613	.96966	.82907	6.5851	3.2187
#2	.39003	.71505	1.3562	.97273	.82517	6.5517	3.2189

Elem	1/PB	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	2.1317	2.5930	.70083	1.4386	.95302	5.1454	.57780
#1	2.1236	2.5955	.69646	1.4375	.95290	5.1384	.57748
#2	2.1398	2.5905	.70521	1.4396	.95314	5.1524	.57811

Method: TRACE1 Standard: STD3
Run Time: 10/15/07 11:38:08

Elem	CA	MG	K	NA
Avge	24.306	8.2879	10.783	2.8074
#1	24.277	8.2749	10.761	2.7982
#2	24.335	8.3009	10.805	2.8165

Method: TRACE1 Standard: STD4
Run Time: 10/15/07 11:44:50

Elem	1/PB	2/PB
Avge	4.2374	5.1220
#1	4.2303	5.0994
#2	4.2445	5.1446

Method: TRACE1 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AL	308.215	Multiple	Standards	8588.61	-200.393	10/15/07 11:28:50
SB	206.838	Multiple	Standards	1226.86	-6.01929	10/15/07 11:28:50
AS	189.042	Multiple	Standards	1499.47	-1.73295	10/15/07 11:28:50
BA	493.409	Multiple	Standards	185.929	-1.06345	10/15/07 11:28:50
BE	313.042	Multiple	Standards	434.285	2.73674	10/15/07 11:28:50
CD	226.502	Multiple	Standards	209.837	.275185	10/15/07 11:28:50
CA	317.933	STD3	STD0	1.12714	-.061061	10/15/07 11:44:50
CR	267.716	Multiple	Standards	699.858	-.718209	10/15/07 11:28:50
CO	228.616	Multiple	Standards	630.973	.645363	10/15/07 11:28:50
CU	324.753	Multiple	Standards	540.738	-16.8121	10/15/07 11:28:50
FE	271.441	Multiple	Standards	7971.24	-19.1221	10/15/07 11:28:50
PB	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
MG	279.078	STD3	STD0	1.05155	.000233	10/15/07 11:44:50
MN	257.610	Multiple	Standards	427.543	-.289986	10/15/07 11:28:50
NI	231.604	Multiple	Standards	412.421	4.75104	10/15/07 11:28:50
K	766.491	STD3	STD0	.959209	-.003739	10/15/07 11:44:50
SE	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
AG	328.068	Multiple	Standards	1006.06	-2.06601	10/15/07 11:28:50
NA	330.232	STD3	STD0	.809849	.000333	10/15/07 11:44:50
TL	190.864	Multiple	Standards	2871.31	12.5879	10/15/07 11:28:50
V	292.402	Multiple	Standards	2564.06	.176086	10/15/07 11:28:50
ZN	206.200	Multiple	Standards	1405.56	-.420296	10/15/07 11:28:50
B	249.678	Multiple	Standards	734.268	-1.08061	10/15/07 11:28:50
MO	202.030	Multiple	Standards	1034.62	-.521143	10/15/07 11:28:50
SN	189.989	Multiple	Standards	1216.16	-.874861	10/15/07 11:28:50
SR	421.552	Multiple	Standards	152.050	-.961537	10/15/07 11:28:50
TI	334.941	Multiple	Standards	310.940	-.200050	10/15/07 11:28:50
1/PB	220.351	Multiple	Standards	484.711	4.15397	10/15/07 11:44:50
2/PB	220.352	Multiple	Standards	383.584	-.904275	10/15/07 11:44:50
1/SE	196.021	Multiple	Standards	1393.83	19.3567	10/15/07 11:28:50
2/SE	196.022	Multiple	Standards	670.377	-7.81414	10/15/07 11:28:50
TE	214.200	Multiple	Standards	1073.75	26.4622	10/15/07 11:28:50
ZR	349.600	Multiple	Standards	832.123	-3294.49	10/15/07 11:28:50
SI	288.158	Multiple	Standards	1982.03	-147.502	10/15/07 11:28:50

Method: TRACE1

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AL	308.215	STD0	.000000	-.281309	.281309
		STD1	50000.0	50048.6	-48.6367
		STD2	100000.	99872.2	127.766

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SB	206.838	STD0	.000000	-.008773	.008773
		STD1	500.000	500.174	-.173706
		STD2	1000.00	993.329	6.67133

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AS	189.042	STD0	.000000	.010052	-.010052
		STD1	500.000	493.730	6.27032
		STD2	1000.00	995.501	4.49927

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BA	493.409	STD0	.000000	.007252	-.007252
		STD1	500.000	498.800	1.20035
		STD2	1000.00	1003.40	-3.40063

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BE	313.042	STD0	.000000	.000571	-.000571
		STD1	50.0000	50.5558	-.555828
		STD2	100.000	101.568	-1.56835

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CD	226.502	STD0	.000000	-.001963	.001963
		STD1	500.000	506.021	-6.02054
		STD2	1000.00	1010.47	-10.4708

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
CA	317.933	STD0	.033061	.083505	-.050444
		STD3	27.3352	24.3060	3.02921

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CR	267.716	STD0	.000000	.002776	-.002776
		STD1	500.000	499.018	.981628
		STD2	1000.00	1000.26	-.257202

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CO	228.616	STD0	.000000	.002774	-.002774
		STD1	500.000	500.459	-.458588
		STD2	1000.00	1003.14	-3.13672

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CU	324.753	STD0	.000000	.001547	-.001547
		STD1	500.000	499.267	.732880
		STD2	1000.00	999.772	.228210

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
FE	271.441	STD0	.000000	.360812	-.360812
		STD1	50000.0	49972.0	28.0391
		STD2	100000.	100233.	-232.570

CorCoef: 1.00000

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	.000122	-.000106	.000227
		STD3	8.71535	8.28790	.427448

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MN	257.610	STD0	.000000	.003613	-.003613
		STD1	500.000	498.503	1.49661
		STD2	1000.00	999.897	.102661

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
NI	231.604	STD0	.000000	.005381	-.005381
		STD1	500.000	499.174	.826324
		STD2	1000.00	1002.65	-2.65271

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	-.004126	-.000403	-.003723
		STD3	10.3396	10.7832	-.443596

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	.007546	-.007546
		STD1	500.000	498.529	1.47064
		STD2	1000.00	1003.10	-3.09540

CorCoef: 0.99999

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
NA	330.232	STD0	-.001357	-.002088	.000730
		STD3	2.27386	2.80735	-.533489

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TL	190.864	STD0	.000000	-.005680	.005680
		STD1	500.000	511.730	-11.7300
		STD2	1000.00	1018.92	-18.9160

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	.006446	-.006446
		STD1	500.000	496.790	3.20966
		STD2	1000.00	998.737	1.26263

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
ZN	206.200	STD0	.000000	.006879	-.006879
		STD1	500.000	498.974	1.02588
		STD2	1000.00	1003.45	-3.45178

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	-.005169	.005169
		STD1	500.000	500.375	-.375366
		STD2	1000.00	996.615	3.38470

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MO	202.030	STD0	.000000	.010739	-.010739
		STD1	500.000	497.852	2.14786
		STD2	1000.00	1004.30	-4.29559

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SN	189.989	STD0	.000000	.007083	-.007083
		STD1	500.000	499.683	.316681
		STD2	1000.00	1005.03	-5.03339

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SR	421.552	STD0	.000000	-.005589	.005589
		STD1	500.000	501.118	-1.11771
		STD2	1000.00	997.765	2.23541

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TI	334.941	STD0	.000000	.001396	-.001396
		STD1	500.000	499.772	.228241
		STD2	1000.00	1000.66	-.660400

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/PB	220.351	STD0	.000000	.078903	-.078903
		STD1	500.000	516.879	-16.8795
		STD2	1000.00	1037.42	-37.4180
		STD4	2000.00	2058.06	-58.0623

CorCoef: 0.99971

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/PB	220.352	STD0	.000000	-.038643	.038643
		STD1	500.000	494.393	5.60703
		STD2	1000.00	993.747	6.25293
		STD4	2000.00	1963.80	36.2000

CorCoef: 0.99986

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/SE	196.021	STD0	.000000	-.001756	.001756
		STD1	500.000	498.800	1.19952
		STD2	1000.00	996.195	3.80499

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/SE	196.022	STD0	.000000	-.002800	.002800
		STD1	500.000	479.401	20.5986
		STD2	1000.00	956.563	43.4369

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TE	214.200	STD0	.000000	-.001825	.001825
		STD1	500.000	525.615	-25.6147
		STD2	1000.00	1049.77	-49.7704

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
ZR	349.600	STD0	.000000	-.004673	.004673
		STD1	500.000	495.460	4.53955
		STD2	1000.00	987.121	12.8787

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SI	288.158	STD0	.000000	-.005732	.005732
		STD1	500.000	501.148	-1.14777
		STD2	1000.00	997.705	2.29547

CorCoef: 1.00000

Method: TRACE1 Sample Name: IVICV Operator: LCM
Run Time: 10/15/07 11:50:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5133.898	407.3671	Q432.0196	Q425.8439	41.86076	Q42.15286	4879.689
#1	5141.754	407.1971	Q433.6787	Q427.8549	41.92762	Q42.33773	4905.535
#2	5126.041	407.5371	Q430.3605	Q423.8329	41.79391	41.96799	4853.842
Errors	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Fail	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	405.5989	Q431.2375	400.8618	5120.770	419.0692	5040.260	414.5573
#1	407.6485	Q432.8221	401.4194	5130.791	419.6387	5058.112	416.1852
#2	403.5494	Q429.6528	400.3042	5110.748	418.4997	5022.408	412.9293
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	NI	K	SE	AG	NA	TL	V
Avge	419.4764	Q4676.715	414.7237	402.9913	9891.973	403.3582	414.3597
#1	Q420.5795	Q4700.526	414.9318	403.6583	9913.151	403.5999	414.5226
#2	418.3732	Q4652.903	414.5156	402.3243	9870.795	403.1165	414.1968
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	400.0000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	Q424.7236	Q422.7730	409.2362	414.7577	409.7264	408.0906	417.5623
#1	Q427.4460	Q423.6411	411.2290	418.5987	411.1912	408.8456	418.2600
#2	Q422.0011	Q421.9048	407.2434	410.9167	408.2615	407.3355	416.8646
Errors	QC Fail	QC Fail	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	TE	ZR	SI
Avge	419.8223	420.5871	411.7915	Q-2.57497	Q25.29821	Q128.2976
#1	420.3277	421.8931	411.4506	Q-2.94108	Q48.03990	Q130.0801
#2	419.3168	419.2811	412.1325	Q-2.20886	Q2.556509	Q126.5151

Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail	QC Fail	QC Fail
Value				400.0000	400.0000	400.0000
Range				5.000000	5.000000	5.000000

Method: TRACE1 Sample Name: IBICB Operator: LCM
Run Time: 10/15/07 11:59:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	.3141691	-1.51115	-4.12409	.1777922	-.017990	.2287331	-5.91191
#1	3.059128	-1.38163	-2.37161	.2438824	-.027270	.1547752	-1.75803
#2	-2.43079	-1.64067	-5.87658	.1117019	-.008709	.3026910	-10.0658
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.073650	-.463561	.5736347	13.86955	.3647644	1.849557	.1436164
#1	.2363584	-.131028	.8848051	23.93885	.4501696	6.536454	.1794439
#2	-.383658	-.796094	.2624643	3.800253	.2793592	-2.83734	.1077889
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	NI	K	SE	AG	NA	TL	V
Avge	.8715713	-1.06318	2.928207	-.243760	17.01564	2.336095	.4499925
#1	.8693538	1.921632	3.158138	-.452050	46.15290	1.610534	.3836308
#2	.8737889	-4.04799	2.698276	-.035469	-12.1216	3.061655	.5163543
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	5000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.458483	.7201092	.9406202	-.211041	.1548840	.1893300	.6947821
#1	-.645953	.8633672	1.110995	-.257482	.2093162	.1740477	1.494946
#2	-.271013	.5768513	.7702455	-.164601	.1004518	.2046123	-.105382
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	.1992761	3.968444	2.407610	2.743596	-13.6717	3.368199
#1	-.072699	5.866533	1.803462	1.479487	-2.92086	4.592876
#2	.4712515	2.070355	3.011758	4.007704	-24.4225	2.143522
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: CVCCV Operator: LCM
Run Time: 10/15/07 12:09:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51104.41	508.4334	510.0301	505.9164	49.97492	495.2717	100239.4
#1	51211.32	508.5430	511.3290	506.8707	50.16396	495.1401	100345.3
#2	50997.52	508.3238	508.7313	504.9622	49.78589	495.4033	100133.4
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	496.2358	495.9963	509.7940	49374.04	502.0102	99616.18	500.8107
#1	496.0988	496.8426	510.8653	49382.31	503.1297	99644.12	501.5215
#2	496.3729	495.1501	508.7227	49365.77	500.8907	99588.23	500.0999
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	NI	K	SE	AG	NA	TL	V
Avge	495.5789	Q78590.34	510.9140	516.6251	99015.89	502.3749	503.3383
#1	495.5510	Q78753.05	511.9113	518.3325	99454.39	502.2454	505.1464
#2	495.6069	Q78427.63	509.9167	514.9178	98577.40	502.5043	501.5302
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	493.8810	512.8453	503.8872	503.8322	502.2455	505.3298	493.2147
#1	496.1674	512.1279	501.5550	503.7669	502.7546	506.0069	492.8326
#2	491.5946	513.5627	506.2193	503.8976	501.7363	504.6528	493.5969
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	TE	ZR	SI
Avge	506.4076	507.7559	512.4927	502.6491	473.1299	526.9307
#1	508.2779	506.1125	514.8104	504.6086	470.8286	527.3029
#2	504.5374	509.3993	510.1751	500.6895	475.4312	526.5586
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB Operator: LCM
Run Time: 10/15/07 12:18:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	2.860775	-1.79296	-2.67084	.0623509	-.014148	.3217765	1.966455
#1	4.637888	-2.23513	-4.61005	.0902399	-.084152	.3461385	6.630825
#2	1.083661	-1.35080	-.731635	.0344619	.0558557	.2974145	-2.69792
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.060442	-.541073	.5232276	4.563844	-1.20696	15.61614	.0501216
#1	.0363137	-.681858	.4625697	6.920395	-1.39641	19.72006	.0813852
#2	-.157197	-.400288	.5838855	2.207292	-1.01752	11.51222	.0188580
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	NI	K	SE	AG	NA	TL	V
Avge	.4251739	15.06957	2.991117	-.116531	20.72710	1.480517	.4144767
#1	.0664508	21.98564	2.932813	-.478872	89.18086	1.645799	.4467216
#2	.7838970	8.153491	3.049421	.2458097	-47.7267	1.315234	.3822319
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0824858	.3440773	.8643307	-.028154	.0659664	.0931753	1.741840
#1	.0970504	1.062506	.7846260	.8837755	.0859087	.0125126	1.246346
#2	.0679213	-.374351	.9440355	-.940083	.0460242	.1738380	2.237334
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-2.68184	1.543702	3.714444	4.460051	-50.1349	1.587078
#1	-2.71826	2.352086	3.222900	4.150085	-89.0334	1.595643
#2	-2.64542	.7353194	4.205989	4.770018	-11.2363	1.578513
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: PQL Operator: LCM
Run Time: 10/15/07 12:28:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	197.3385	19.09102	Q15.82728	5.059845	1.869532	6.150645	946.0452
#1	198.2424	20.00750	18.22362	5.093448	1.822560	6.151120	948.0227
#2	196.4346	18.17454	Q13.43094	5.026243	1.916505	6.150170	944.0676
Errors	QC Pass	QC Pass	QC Fail	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	4.514743	4.432030	10.54570	147.9704	10.71808	253.4087	4.920504
#1	4.236689	4.592348	10.87625	156.5874	10.60697	254.4936	4.938829
#2	4.792797	4.271711	10.21515	139.3533	10.82918	252.3239	4.902178
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	NI	K	SE	AG	NA	TL	V
Avge	10.37055	226.2552	23.54242	4.347186	2485.238	31.65633	10.56760
#1	10.42675	227.1494	23.60718	4.469232	2487.965	31.69352	10.97837
#2	10.31435	225.3610	23.47766	4.225140	2482.511	31.61915	10.15684
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	5.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	21.37036	16.10802	5.234111	23.92066	4.997639	25.17789	12.44079
#1	21.35685	15.97549	4.822437	23.40858	5.001102	25.23784	14.24752
#2	21.38386	16.24054	5.645785	24.43273	4.994176	25.11794	10.63406
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	9.856400	25.61044	22.50803	1.432148	-45.4026	59.53021
#1	8.786416	27.74542	21.53766	.3533907	-32.1141	59.34282
#2	10.92638	23.47547	23.47840	2.510905	-58.6911	59.71760
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						50.00000
Range						20.00000

Method: TRACE1 Sample Name: IAICSAI Operator: LCM
Run Time: 10/15/07 12:37:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	492320.1	.1382735	-.701267	.8668915	.4302354	2.667034	517178.2
#1	491655.7	.5454688	-1.69050	.8857608	.4685457	2.489180	518540.0
#2	492984.5	-.268922	.2879670	.8480221	.3919251	2.844889	515816.3
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	100000.0	10.00000	10.00000	2.500000	1.000000	5.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.249878	Q3.089583	2.508907	192110.7	Q5.686335	502000.8	Q12.43376
#1	2.357993	Q3.248193	2.461818	192053.7	3.252017	502145.7	Q12.51558
#2	2.141762	Q2.930973	2.555995	192167.6	Q8.120652	501855.8	Q12.35195
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	2.500000	2.500000	5.000000	40000.00	5.000000	100000.0	2.500000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.139652	2.129641	7.613105	-.351422	182.5304	.9225006	1.639032
#1	3.369112	6.204653	5.418935	-.267155	170.0923	-2.59848	2.002342
#2	2.910192	-1.94537	9.807275	-.435690	194.9685	4.443485	1.275721
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	125.0000	10.00000	2.500000	1250.000	15.00000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	Q25.26358	1.552295	-.506347	-1.22463	Q4.224878	1.576450	-12.5102
#1	Q24.86053	1.437184	-.609292	-1.58848	Q4.233259	1.619060	-13.4786
#2	Q25.66664	1.667406	-.403402	-.860785	Q4.216497	1.533839	-11.5419
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	7.500000	2.500000	12.50000	2.500000	12.50000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	14.78420	8.959743	6.939362	-13.6444	-25.7352	Q37.57180
#1	11.61688	7.051611	4.602173	-11.3843	-10.1875	Q37.52086
#2	17.95152	10.86787	9.276550	-15.9046	-41.2828	Q37.62274
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value						.0000000
Range						25.00000

Method: TRACE1 Sample Name: IBICSABI Operator: LCM
Run Time: 10/15/07 12:46:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	490886.4	628.3444	99.79442	518.8569	485.5687	948.9258	513244.5
#1	491865.8	628.0204	100.2181	519.7526	486.5786	950.3761	514621.9
#2	489907.0	628.6683	99.37068	517.9613	484.5587	947.4754	511867.2
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	485.0955	474.8469	530.6918	192413.8	52.86496	499880.2	502.3513
#1	485.8512	475.7096	530.7605	192555.1	52.89670	500874.6	503.0422
#2	484.3397	473.9842	530.6231	192272.5	52.83322	498885.8	501.6604
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	NI	K	SE	AG	NA	TL	V
Avge	950.6619	5349.878	58.84224	212.8888	10610.86	93.58326	494.4771
#1	952.9210	5365.005	59.71592	213.1668	10685.72	92.03395	495.1760
#2	948.4028	5334.751	57.96856	212.6108	10536.00	95.13257	493.7783
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	10000.00	100.0000	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	950.2869	1038.888	995.1935	1009.990	510.9906	983.8831	38.50790
#1	950.6340	1040.910	993.3865	1010.686	511.7916	985.3254	43.57780
#2	949.9397	1036.866	997.0004	1009.293	510.1896	982.4408	33.43800
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000	500.0000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	60.04305	70.99669	52.76456	175.6320	Q171.6562	Q1360.754
#1	57.55563	71.50453	53.82119	182.1514	Q166.6780	Q1364.140
#2	62.53047	70.48884	51.70792	169.1125	Q176.6343	Q1357.368
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Fail
Value				200.0000	400.0000	1000.000
Range				20.00000	20.00000	20.00000

Method: TRACE1 Sample Name: LR Operator: LCM
Run Time: 10/15/07 12:56:14
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	277.0113	5094.269	2060.999	9902.679	494.7146	2017.113	187.0573
#1	216.6953	5098.578	2063.142	9903.643	494.0369	2014.188	133.8277
#2	337.3272	5089.958	2058.855	9901.715	495.3924	2020.038	240.2869
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	10121.87	10054.35	10208.64	512054.2	20184.94	193.3044	9832.869
#1	10117.31	10044.89	10225.57	511607.5	20211.09	134.4708	9817.956
#2	10126.43	10063.80	10191.72	512501.0	20158.79	252.1380	9847.782
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	NI	K	SE	AG	NA	TL	V
Avge	7552.544	21.68069	2037.328	1019.250	286.8341	2015.455	10185.89
#1	7548.693	22.81987	2049.312	1016.100	288.8993	2011.750	10169.87
#2	7556.396	20.54151	2025.345	1022.401	284.7690	2019.161	10201.91
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	7500.000		2000.000	1000.000		2000.000	10000.00
Range	5.000000		5.000000	5.000000		5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	Q20405.95	5056.524	9901.081	10171.27	2000.832	10065.78	19971.06
#1	Q20362.32	5064.962	9864.378	10165.72	2005.845	10071.76	19986.55
#2	Q20449.59	5048.087	9937.784	10176.82	1995.820	10059.79	19955.57
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	10000.00	5000.000	10000.00	10000.00	2000.000	10000.00	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	20291.88	2024.687	2043.649	-70.2042	8.996702	11549.78
#1	20323.35	2030.648	2058.644	-72.2487	11.19481	11517.77
#2	20260.40	2018.725	2028.654	-68.1596	6.798592	11581.81
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

Method: TRACE1 Sample Name: CVCCV3 Operator: LCM
Run Time: 10/15/07 13:11:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50948.76	509.8218	513.3394	502.6016	50.21446	499.7346	99854.92
#1	51035.57	509.7307	515.3373	503.6529	50.43440	500.5939	100029.2
#2	50861.95	509.9129	511.3415	501.5503	49.99453	498.8754	99680.64
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	500.0801	498.4637	509.8859	49453.38	505.6500	100096.3	501.1163
#1	500.6970	498.8475	513.2064	49518.79	509.2083	100187.3	501.6880
#2	499.4631	498.0799	506.5654	49387.97	502.0918	100005.2	500.5446
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	NI	K	SE	AG	NA	TL	V
Avge	499.3333	Q78250.84	512.8267	518.2504	98766.03	508.6728	505.6337
#1	500.9059	Q78322.12	516.0697	520.7260	98818.24	509.2217	508.9590
#2	497.7606	Q78179.57	509.5837	515.7747	98713.81	508.1240	502.3084
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	500.5481	516.8887	505.4334	510.9117	503.2797	505.0317	500.0606
#1	502.9956	518.2903	504.4568	514.6684	504.2274	507.5141	501.1761
#2	498.1006	515.4869	506.4100	507.1549	502.3321	502.5494	498.9451
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	TE	ZR	SI
Avge	508.4443	514.3903	512.0444	512.7241	Q445.3921	529.1240
#1	513.2239	514.5230	516.8427	516.6733	450.2925	531.3589
#2	503.6648	514.2576	507.2462	508.7750	Q440.4916	526.8890
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB3 Operator: LCM
Run Time: 10/15/07 13:20:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19.11366	-.857416	-1.73020	.3508530	-.072515	.3168694	8.411686
#1	25.76906	-1.30982	-3.38132	.4252348	-.030298	.5581129	20.54191
#2	12.45826	-.405011	-.079088	.2764713	-.114731	.0756259	-3.71854
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3991348	.1106860	1.259990	33.81503	.3401457	39.09354	.3309605
#1	.2036688	-.237287	1.468049	41.94142	.3412620	51.09840	.4237566
#2	.5946008	.4586591	1.051931	25.68864	.3390293	27.08866	.2381644
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	NI	K	SE	AG	NA	TL	V
Avge	1.065415	35.49834	2.992469	-.176978	6.987442	1.727012	.9368520
#1	.8054231	37.93840	3.548880	-.579129	-46.4720	1.402261	1.143822
#2	1.325406	33.05828	2.436057	.2251739	60.44691	2.051763	.7298824
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.9939690	2.603626	2.324393	1.079644	.2094815	.4340753	2.761322
#1	1.127997	2.274233	2.314702	-.679778	.2724040	.4850888	-.664858
#2	.8599413	2.933019	2.334084	2.839066	.1465590	.3830618	6.187503
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-.870924	7.533047	.7218206	3.614391	-12.0274	6.303515
#1	.8438376	3.252291	3.696811	1.364788	-.773856	7.114989
#2	-2.58569	11.81380	-2.25317	5.863994	-23.2809	5.492039
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: BLK100842 Operator: LCM
Run Time: 10/15/07 13:30:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	39.21865	1.133894	-1.53534	2.253506	-.055967	-.238538	68.32393
#1	40.85037	1.595422	-1.67796	2.244791	-.110919	-.193956	66.82890
#2	37.58694	.6723653	-1.39271	2.262222	-.001015	-.283121	69.81895
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	1.333009	-1.34316	.5774077	28.10665	1.477433	10.70126	.2900559
#1	1.477268	-1.38672	.6006340	24.56316	1.039059	11.10226	.2809755
#2	1.188750	-1.29961	.5541815	31.65015	1.915806	10.30027	.2991363
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	NI	K	SE	AG	NA	TL	V
Avge	-4.77756	31.04352	3.875387	-.759350	479.0967	-4.19628	1.602433
#1	-4.55671	44.90480	3.681266	-.809292	609.6927	-5.33881	2.389162
#2	-4.99841	17.18224	4.069509	-.709409	348.5008	-3.05375	.8157038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	125.0000	10.00000	2.500000	1250.000	15.00000	5.000000
Low	-5.00000	-125.000	-10.0000	-2.50000	-1250.00	-15.0000	-5.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.317931	H12.83388	1.754678	H25.08679	1.198507	.7410075	2.547466
#1	2.232717	H13.43197	2.322168	H24.30868	1.191069	.7751552	2.306194
#2	2.403146	H12.23580	1.187188	H25.86490	1.205945	.7068596	2.788739
Errors	LC Pass	LC High	LC Pass	LC High	LC Pass	LC Pass	NOCHECK
High	10.00000	7.500000	2.500000	12.50000	5.000000	12.50000	
Low	-10.0000	-7.50000	-2.50000	-12.5000	-5.00000	-12.5000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	.9419192	-12.2903	11.95773	-28.2163	-25.2843	11.23050
#1	.4049932	-16.8580	13.95037	-26.4020	-22.8411	12.38481
#2	1.478845	-7.72264	9.965077	-30.0307	-27.7276	10.07619
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						50.00000
Low						-50.0000

Method: TRACE1 Sample Name: BKS100842 Operator: LCM
Run Time: 10/15/07 13:39:42
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10251.08	101.0599	97.63041	1034.493	51.85267	103.9071	9918.647
#1	10257.46	102.2717	97.28782	1037.672	51.70409	104.0429	9918.072
#2	10244.71	99.84799	97.97300	1031.313	52.00124	103.7712	9919.221
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
Avge	528.9856	507.3394	527.3196	10249.65	1009.596	9885.594	1036.941
#1	529.0394	508.3748	523.6224	10252.64	1005.287	9883.794	1037.414
#2	528.9317	506.3040	531.0167	10246.67	1013.905	9887.393	1036.468
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	NI	K	SE	AG	NA	TL	V
Avge	515.2456	9087.201	95.52731	103.3597	9992.028	94.93939	529.8121
#1	514.5790	9129.303	96.41387	102.4198	10197.52	94.72550	527.9105
#2	515.9121	9045.101	94.64074	104.2996	9786.531	95.15329	531.7137
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1029.868	989.4305	521.6186	539.0127	1041.144	2059.023	1007.464
#1	1030.359	988.9554	520.8610	539.2234	1043.678	2047.868	1005.412
#2	1029.376	989.9056	522.3762	538.8020	1038.611	2070.179	1009.517
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	1010.661	83.60965	101.4857	353.2538	386.5946	8905.668
#1	1005.224	84.23547	102.5026	357.3728	369.3283	8900.783
#2	1016.098	82.98383	100.4689	349.1347	403.8609	8910.553
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						12000.00
Low						8000.000

Method: TRACE1 Sample Name: S 710030-001-001-1/1 Operator: LCM
Run Time: 10/15/07 13:49:03
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	26272.18	-1.83793	9.107149	56.79788	.6733240	.6865826	2426.246
#1	26258.46	-2.85375	9.792768	56.89527	.7002633	.9481068	2427.420
#2	26285.89	-.822113	8.421530	56.70050	.6463847	.4250584	2425.073
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	403.1260	20.40022	124.6567	238714.7	32.96145	1956.518	880.1261
#1	403.2591	20.17233	124.1758	238656.7	32.79711	1959.104	879.8968
#2	402.9929	20.62811	125.1376	238772.6	33.12579	1953.932	880.3554
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	NI	K	SE	AG	NA	TL	V
Avge	91.22833	789.7726	9.994810	-.265770	218.5851	-.096890	541.4730
#1	91.61084	790.9366	11.78590	-.796134	191.6134	.3072434	540.0139
#2	90.84582	788.6086	8.203719	.2645945	245.5568	-.501022	542.9321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	177.7406	-.364487	4.371820	4.610909	55.53782	11855.17	31.63063
#1	178.2425	-.494392	4.789625	4.266584	55.50952	11825.89	29.39018
#2	177.2388	-.234582	3.954015	4.955235	55.56612	11884.44	33.87107
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	33.62642	2.882923	13.55035	-19.0592	60.58413	856.7055
#1	34.50009	1.354338	17.00127	-19.6415	49.86942	856.1593
#2	32.75275	4.411509	10.09942	-18.4769	71.29883	857.2517
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: SP710030-001-001-1/1 Operator: LCM
Run Time: 10/15/07 13:58:18
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	34376.69	4.366674	18.59724	185.3173	5.743000	10.30773	3168.140
#1	35780.23	6.979652	20.82396	192.8071	6.025762	10.71641	3257.099
#2	32973.15	1.753694	16.37052	177.8275	5.460237	9.899057	3079.180
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	468.7207	70.33462	181.0029	244222.2	139.6091	2957.188	991.9872
#1	488.3082	73.74786	186.7236	254089.4	144.0759	3076.794	1031.456
#2	449.1331	66.92137	175.2822	234355.0	135.1423	2837.581	952.5184
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	NI	K	SE	AG	NA	TL	V
Avge	154.3679	1814.576	17.75349	9.964848	1195.151	11.29057	611.8704
#1	159.7116	1888.966	19.34147	11.01123	1340.941	12.41645	634.2338
#2	149.0242	1740.185	16.16550	8.918468	1049.361	10.16468	589.5070
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	286.4987	93.75947	47.08872	53.45745	201.1627	12144.91	134.0248
#1	298.7143	98.52657	48.47696	57.17618	209.5551	12537.25	142.4197
#2	274.2831	88.99236	45.70047	49.73872	192.7702	11752.57	125.6299
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	142.4008	8.379067	22.44027	14.76469	102.2888	1101.080
#1	144.9036	14.90424	21.55961	21.11922	115.4152	1151.812
#2	139.8981	1.853897	23.32094	8.410172	89.16246	1050.348
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: SD710030-001-001-1/1 Operator: LCM
Run Time: 10/15/07 14:07:52
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	35103.61	4.331883	20.50601	186.2320	5.645663	10.48266	3289.200
#1	36550.14	5.983767	20.21672	193.8939	5.945698	11.02976	3395.684
#2	33657.08	2.679999	20.79530	178.5700	5.345628	9.935558	3182.717
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	476.4852	70.20637	184.5093	248408.5	137.0799	3012.633	1000.628
#1	497.6575	73.12331	193.0577	259012.9	143.5241	3143.001	1043.707
#2	455.3128	67.28945	175.9609	237804.1	130.6356	2882.265	957.5486
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	NI	K	SE	AG	NA	TL	V
Avge	156.7607	1815.013	16.03182	9.619383	1077.031	10.73753	618.7291
#1	163.9217	1890.341	16.02839	9.886494	1141.345	11.37960	647.2405
#2	149.5998	1739.686	16.03524	9.352273	1012.717	10.09545	590.2178
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	287.8763	93.99458	47.75547	53.48875	202.7378	12380.69	129.3321
#1	297.6578	98.38315	49.30598	55.59793	211.0725	12905.51	133.8251
#2	278.0949	89.60603	46.20497	51.37957	194.4030	11855.87	124.8391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	140.9533	1.434402	23.33007	7.630165	105.2113	1109.704
#1	148.3733	-1.01236	24.54826	4.555466	107.3223	1168.693
#2	133.5334	3.881162	22.11187	10.70486	103.1004	1050.714
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: PS710030-001-001-1/1 Operator: LCM
Run Time: 10/15/07 14:17:07
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	27344.69	77.88167	91.34452	77.16688	10.53754	20.06946	7400.689
#1	27650.22	79.79678	89.82282	77.74835	10.53638	19.83507	7403.751
#2	27039.17	75.96656	92.86623	76.58543	10.53869	20.30385	7397.627
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	425.7455	50.34830	154.8702	241555.1	113.3399	6930.058	963.9304
#1	431.5222	50.78140	156.0930	244618.8	113.1299	6942.295	974.2632
#2	419.9689	49.91520	153.6474	238491.4	113.5500	6917.821	953.5975
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	NI	K	SE	AG	NA	TL	V
Avge	132.1796	5442.484	83.34995	43.14188	5048.488	99.21292	566.3053
#1	132.7369	5436.202	82.52788	43.12850	4997.505	96.70577	573.2255
#2	131.6222	5448.766	84.17202	43.15525	5099.471	101.7201	559.3851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	257.3227	71.81488	33.67167	107.5093	76.51896	11885.33	111.0190
#1	258.1720	71.12589	33.49896	107.6261	77.09561	12086.60	112.0880
#2	256.4735	72.50388	33.84438	107.3925	75.94231	11684.06	109.9499
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	114.4999	75.81502	87.11705	480.5032	550.4392	5835.137
#1	113.6504	70.79333	88.39479	479.9508	556.8690	5845.900
#2	115.3495	80.83670	85.83932	481.0556	544.0093	5824.373
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: SE710030-001-001-1/1 Operator: LCM
Run Time: 10/15/07 14:26:22
Comment: UG/L 50
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5442.996	-2.65665	-2.70957	14.73204	.0372000	-.047972	2209.181
#1	5485.381	-2.29615	-2.13146	14.83382	.1129011	.0179181	2218.183
#2	5400.610	-3.01714	-3.28767	14.63025	-.038501	-.113863	2200.179
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	83.39792	4.098866	34.65826	49078.74	6.908515	437.9021	182.6096
#1	84.22528	4.137785	35.18727	49424.42	6.352438	438.0288	184.1486
#2	82.57055	4.059947	34.12925	48733.07	7.464592	437.7753	181.0706
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	NI	K	SE	AG	NA	TL	V
Avge	19.27766	156.6439	3.219804	-.781195	19.40833	1.305837	112.5620
#1	19.85928	154.6842	2.786899	-.749749	-28.2818	.2671413	113.7091
#2	18.69605	158.6036	3.652708	-.812641	67.09849	2.344532	111.4148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	49.19988	-.160687	.8255372	.4141650	17.57365	2446.008	10.22358
#1	49.13114	-.405198	.9127203	.2378390	17.69559	2469.356	10.31453
#2	49.26862	.0838248	.7383540	.5904911	17.45171	2422.661	10.13264
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	5.250585	4.723225	2.467696	-4.10941	-29.0092	194.1984
#1	4.370916	2.012316	3.173790	-6.32255	-26.2308	194.9041
#2	6.130252	7.434133	1.761602	-1.89627	-31.7875	193.4926
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-002-002-1/1 Operator: LCM
Run Time: 10/15/07 14:35:37
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	17123.63	-.898716	7.068366	43.11704	.3972015	1.571795	2585.226
#1	17321.78	1.580442	6.325032	43.72307	.4457603	1.625122	2596.482
#2	16925.48	-3.37787	7.811699	42.51100	.3486427	1.518469	2573.969
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	322.3750	18.52247	189.1521	230869.2	118.8747	1658.239	665.8357
#1	326.6532	19.01561	191.6190	234026.9	120.1435	1684.568	675.4504
#2	318.0968	18.02933	186.6853	227711.5	117.6060	1631.909	656.2211
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	NI	K	SE	AG	NA	TL	V
Avge	68.26384	247.7111	10.27321	1.087980	316.1586	2.410658	638.0429
#1	69.42982	260.0402	11.78932	1.685409	362.8800	3.867687	646.0282
#2	67.09785	235.3819	8.757099	.4905521	269.4371	.9536285	630.0576
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	223.3960	-2.93858	4.249832	10.76954	41.11472	15196.19	117.5474
#1	226.9787	-2.63210	3.993218	9.291481	41.54365	15455.03	119.3143
#2	219.8133	-3.24506	4.506446	12.24761	40.68580	14937.34	115.7805
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	119.5380	6.898819	11.95998	-17.3349	48.15683	766.3124
#1	120.5577	7.468377	13.94934	-17.6718	53.70017	811.4846
#2	118.5183	6.329262	9.970612	-16.9979	42.61350	721.1403
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-003-003-1/1 Operator: LCM
Run Time: 10/15/07 14:45:11
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18922.53	2.742019	8.166469	60.51822	.4690735	2.773274	1366.842
#1	19579.95	3.400382	10.58662	62.66883	.5741870	2.884127	1407.245
#2	18265.11	2.083655	5.746313	58.36761	.3639599	2.662420	1326.438
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	356.8845	17.93999	395.3012	263900.8	419.0906	1686.161	710.9147
#1	369.1378	18.67561	407.3854	273021.1	431.1583	1738.781	734.6959
#2	344.6313	17.20437	383.2170	254780.4	407.0228	1633.542	687.1336
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	NI	K	SE	AG	NA	TL	V
Avge	70.46699	399.2941	11.96478	.5347192	96.87803	7.772465	631.3870
#1	73.18323	415.8880	12.63511	.7705828	180.3280	5.047318	650.5522
#2	67.75075	382.7003	11.29445	.2988555	13.42807	10.49761	612.2218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	435.6373	-2.84367	4.561064	19.71259	38.80666	15031.16	409.3573
#1	454.9092	-1.92017	4.546514	21.30711	40.17489	15534.29	428.5916
#2	416.3654	-3.76716	4.575613	18.11807	37.43844	14528.03	390.1230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	423.9568	5.960140	14.96677	-15.6184	75.00854	781.3879
#1	432.4412	10.22965	13.83748	-8.78317	83.10738	845.6448
#2	415.4724	1.690630	16.09607	-22.4537	66.90972	717.1311
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-004-004-1/1 Operator: LCM
Run Time: 10/15/07 14:54:26
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	40339.10	-1.25588	9.079696	47.81173	.6340822	1.094809	1515.098
#1	41876.90	.3721027	9.882091	49.76315	.7137908	1.118479	1577.816
#2	38801.29	-2.88387	8.277300	45.86032	.5543736	1.071140	1452.380
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	333.6397	14.13798	161.7454	262101.8	98.92550	1629.990	636.0389
#1	347.1657	14.99410	168.0210	273362.6	101.8631	1695.430	662.9163
#2	320.1136	13.28186	155.4699	250841.1	95.98794	1564.551	609.1614
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	NI	K	SE	AG	NA	TL	V
Avge	85.36121	459.3069	13.22976	.5479435	-13.2417	3.639013	605.6277
#1	88.89899	482.7323	12.57459	.6605729	172.8538	4.501850	630.0733
#2	81.82343	435.8816	13.88492	.4353141	-199.337	2.776177	581.1821
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	208.9730	-3.51013	3.568544	6.703174	44.91012	14346.36	92.52181
#1	217.8841	-3.62517	3.709992	6.450842	46.66711	14920.42	96.31681
#2	200.0618	-3.39509	3.427095	6.955505	43.15313	13772.31	88.72679
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	102.1270	2.891152	18.39869	-23.8177	118.7615	1115.933
#1	104.6359	3.876500	16.92331	-26.0918	136.0494	1166.947
#2	99.61810	1.905804	19.87407	-21.5437	101.4736	1064.919
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: CVCCV4 Operator: LCM
Run Time: 10/15/07 15:06:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51140.81	515.2407	515.3175	500.4961	50.44924	501.7990	101061.0
#1	51174.68	514.1663	512.4876	501.0513	50.42055	501.7704	100976.8
#2	51106.93	516.3150	518.1475	499.9409	50.47793	501.8276	101145.2
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	502.9836	500.2099	512.8505	49495.38	506.6198	101216.1	502.8261
#1	502.1048	498.8558	511.3087	49500.22	504.0526	101184.3	502.6474
#2	503.8624	501.5639	514.3923	49490.54	509.1870	101247.9	503.0048
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	NI	K	SE	AG	NA	TL	V
Avge	500.2313	Q77709.59	515.0914	523.3986	98968.33	500.8118	507.6954
#1	498.8173	Q77778.07	512.1184	521.9016	99176.27	492.9617	506.6259
#2	501.6454	Q77641.12	518.0643	524.8955	98760.39	508.6619	508.7650
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	500.5189	520.8740	506.0324	507.5650	505.0189	507.3046	499.9597
#1	498.9846	519.7299	504.1586	508.6705	505.0198	506.2033	497.4508
#2	502.0532	522.0180	507.9061	506.4595	505.0180	508.4058	502.4686
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	TE	ZR	SI
Avge	509.9495	522.2462	511.5136	518.5300	470.8909	534.0381
#1	507.3532	519.7598	508.2973	516.8578	456.7885	531.3939
#2	512.5457	524.7326	514.7299	520.2022	484.9933	536.6822
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB4 Operator: LCM
Run Time: 10/15/07 15:15:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8.262974	-.438875	-3.86867	.0288651	-.190671	.0571908	-14.9085
#1	10.66117	-2.06369	-3.68266	.0110857	-.210372	-.031170	-11.0488
#2	5.864777	1.185941	-4.05468	.0466446	-.170971	.1455515	-18.7682
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1702829	-.313659	-.481292	3.626469	-.317773	17.08563	.0465919
#1	-.402796	-.359406	-.713299	3.522311	-.095526	23.35236	.0391992
#2	.7433620	-.267912	-.249285	3.730627	-.540019	10.81889	.0539846
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	NI	K	SE	AG	NA	TL	V
Avge	.4817409	19.92794	1.869015	-.498574	-86.8937	.9373958	.3169587
#1	.5962270	19.47315	1.707416	-.385701	-214.769	-.877468	-.163441
#2	.3672548	20.38272	2.030615	-.611446	40.98145	2.752260	.7973582
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.251344	.5665456	1.284157	.2965572	.0612108	.5040114	1.980889
#1	-.345795	-.263218	1.316585	-.843275	.0824893	.5171598	.8219098
#2	-.156893	1.396309	1.251729	1.436390	.0399324	.4908631	3.139867
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-1.46758	1.470645	2.067881	3.324775	-53.4763	-.038914
#1	-.554720	-1.07753	3.099568	.6164669	-57.5716	-1.11062
#2	-2.38044	4.018819	1.036193	6.033083	-49.3811	1.032789
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: S 710030-005-005-1/1 Operator: LCM
Run Time: 10/15/07 15:25:08
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	24456.32	.7891221	3.291905	59.97122	.5927604	3.092582	2137.534
#1	25359.98	1.330509	2.421706	62.27152	.6530880	3.257317	2212.534
#2	23552.66	.2477350	4.162103	57.67092	.5324329	2.927847	2062.534
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	362.2084	19.62592	308.0902	246526.4	107.4865	2000.225	824.7696
#1	376.6011	20.80227	318.0657	255923.3	110.9005	2067.240	856.9378
#2	347.8157	18.44956	298.1147	237129.5	104.0726	1933.210	792.6016
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	NI	K	SE	AG	NA	TL	V
Avge	74.10242	506.3249	10.25639	4.182323	230.9822	4.855022	632.8842
#1	76.97507	525.6483	9.765340	4.392951	338.9283	3.964504	653.3795
#2	71.22977	487.0015	10.74745	3.971695	123.0360	5.745541	612.3888
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	262.3323	-3.05297	4.238735	6.233734	55.88813	14861.16	106.5956
#1	272.5971	-3.12923	4.458752	7.942385	58.02438	15373.23	114.3078
#2	252.0675	-2.97670	4.018718	4.525084	53.75188	14349.09	98.88338
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	107.9316	4.335686	13.21640	-21.0403	57.74622	712.4109
#1	109.1964	5.321197	11.98705	-19.0213	55.51810	755.3338
#2	106.6667	3.350175	14.44576	-23.0592	59.97435	669.4881
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-006-006-1/1 Operator: LCM
Run Time: 10/15/07 15:34:43
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	28546.84	.9176598	7.269649	72.27701	.6106787	1.339103	1930.460
#1	29632.44	.1352501	8.218334	75.18980	.6740975	1.416477	2000.478
#2	27461.24	1.700069	6.320964	69.36423	.5472598	1.261728	1860.443
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	386.6146	18.52573	151.9005	230585.6	104.6894	1751.346	803.7848
#1	400.9572	19.22511	156.7617	239462.9	107.3808	1817.247	834.5366
#2	372.2722	17.82634	147.0393	221708.2	101.9981	1685.445	773.0331
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	NI	K	SE	AG	NA	TL	V
Avge	83.04591	645.8965	12.09548	.6532603	192.4224	2.040321	575.8857
#1	86.08857	674.4102	14.34838	-.160195	264.7388	2.272282	594.6802
#2	80.00326	617.3827	9.842577	1.466716	120.1059	1.808361	557.0912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	232.5574	-2.31303	3.287050	14.32367	75.81499	12879.71	100.9004
#1	240.2919	-2.46082	3.768057	14.16919	78.72038	13295.86	102.6139
#2	224.8229	-2.16524	2.806043	14.47814	72.90961	12463.56	99.18700
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	106.5836	8.586776	13.84946	-20.8640	58.74319	722.0267
#1	109.7638	13.12768	14.95841	-24.3575	55.54443	759.0708
#2	103.4033	4.045870	12.74052	-17.3705	61.94194	684.9825
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-007-007-1/1 Operator: LCM
Run Time: 10/15/07 15:43:59
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	44134.84	-1.86997	7.393413	84.12289	.6764882	1.096979	1694.289
#1	44621.25	-1.80427	5.119957	85.09254	.6545752	.8691788	1711.203
#2	43648.44	-1.93568	9.666869	83.15325	.6984012	1.324779	1677.376
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	391.0315	18.41503	158.2106	247005.1	72.45256	1958.889	886.5232
#1	395.2870	18.74721	160.3362	249763.9	73.89933	1980.709	896.1559
#2	386.7760	18.08285	156.0850	244246.3	71.00579	1937.070	876.8904
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	NI	K	SE	AG	NA	TL	V
Avge	110.7061	596.0955	10.75579	1.471962	296.8860	2.935472	570.8099
#1	112.5178	603.3821	11.92582	1.057540	342.6337	3.742622	578.7528
#2	108.8943	588.8088	9.585765	1.886384	251.1384	2.128323	562.8671
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	216.9822	-1.37372	3.586079	10.16563	67.74316	13042.95	71.66109
#1	217.3931	-2.09498	3.212312	10.58550	68.63497	13236.71	68.84441
#2	216.5713	-.652451	3.959847	9.745750	66.85135	12849.19	74.47777
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	72.84788	7.239896	12.51342	-18.4174	78.03851	901.3976
#1	76.42642	5.048468	15.36417	-23.7249	71.50259	920.2405
#2	69.26933	9.431323	9.662666	-13.1098	84.57445	882.5546
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-008-008-1/1 Operator: LCM
Run Time: 10/15/07 15:53:15
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41592.25	7.485580	8.877050	75.06900	.6606399	1.705701	2490.673
#1	41589.70	8.195508	9.088578	74.88312	.6754152	1.776623	2492.800
#2	41594.79	6.775651	8.665522	75.25487	.6458646	1.634779	2488.545
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	345.8846	16.58324	191.1276	230336.0	204.4253	1936.418	837.2994
#1	346.7406	16.82829	190.6585	230345.1	206.3823	1939.133	837.7398
#2	345.0285	16.33820	191.5968	230326.8	202.4683	1933.704	836.8591
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	NI	K	SE	AG	NA	TL	V
Avge	102.2002	663.2465	8.873194	.7700290	303.2892	1.505278	502.4038
#1	102.0903	667.1494	7.195929	1.007892	312.0929	3.576145	502.3957
#2	102.3101	659.3435	10.55046	.5321657	294.4855	-.565590	502.4118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	230.2148	-.321040	4.105203	18.50342	73.33920	11516.06	202.5413
#1	231.2012	-.402644	3.840074	18.48704	73.07037	11493.83	203.7152
#2	229.2285	-.239437	4.370331	18.51980	73.60804	11538.30	201.3675
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	205.3670	2.367252	12.12567	-19.2119	33.94781	1037.825
#1	207.7155	3.044296	9.271256	-15.9943	45.77293	1040.218
#2	203.0185	1.690208	14.98010	-22.4295	22.12269	1035.431
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-009-009-1/1 Operator: LCM
Run Time: 10/15/07 16:02:30
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	42839.93	-.918685	7.169228	99.58218	.7109790	1.999827	2420.876
#1	42690.29	-.029894	5.277400	99.05357	.7192675	1.753103	2408.998
#2	42989.57	-1.80748	9.061056	100.1108	.7026905	2.246551	2432.755
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	369.8236	18.57095	286.9618	235374.8	94.59264	2019.569	1016.808
#1	368.3725	18.48749	285.4506	234421.3	95.12254	2004.367	1012.449
#2	371.2747	18.65442	288.4731	236328.4	94.06273	2034.772	1021.166
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	NI	K	SE	AG	NA	TL	V
Avge	109.1656	612.5718	10.49661	1.272386	238.6732	-.132605	548.8243
#1	108.2466	613.5714	11.18538	1.460087	239.8222	-.186905	546.8784
#2	110.0846	611.5722	9.807850	1.084685	237.5241	-.078304	550.7703
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	314.4015	-.567639	3.023689	13.47611	89.08615	12341.38	93.04118
#1	314.2514	-.228790	2.715742	12.20208	88.89275	12297.83	96.49726
#2	314.5516	-.906489	3.331636	14.75015	89.27956	12384.92	89.58510
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	95.36792	6.689795	12.39964	-17.1575	54.70580	953.0808
#1	94.43471	12.87326	10.34108	-13.4478	55.93547	948.1512
#2	96.30114	.5063295	14.45820	-20.8672	53.47613	958.0105
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-010-010-1/1 Operator: LCM
Run Time: 10/15/07 16:12:05
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	20483.84	-1.76564	5.958541	62.75343	.6685641	.7034464	1034.533
#1	20486.14	-1.78604	4.476216	62.80524	.7348025	.4009857	1028.406
#2	20481.53	-1.74525	7.440866	62.70163	.6023257	1.005907	1040.660
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	399.6603	22.23789	147.7804	241452.3	48.80532	2079.718	760.4733
#1	398.7686	21.95951	147.6520	241142.1	48.12015	2072.151	760.2816
#2	400.5519	22.51628	147.9087	241762.4	49.49048	2087.284	760.6650
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	NI	K	SE	AG	NA	TL	V
Avge	87.61351	386.4840	10.23192	.5343658	165.5617	3.095810	640.3567
#1	87.89241	384.2617	11.49547	.5718566	136.1952	-2.63047	640.2664
#2	87.33462	388.7063	8.968366	.4968749	194.9283	8.822094	640.4469
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	228.3125	-3.56377	4.561781	4.765174	65.29771	14893.28	48.23334
#1	227.5446	-3.17200	4.860339	4.031298	65.46777	14906.28	49.28171
#2	229.0804	-3.95554	4.263223	5.499050	65.12766	14880.28	47.18498
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	49.09090	7.074593	11.81017	-13.9719	80.06836	943.0018
#1	47.53889	12.59277	10.94633	-16.5000	80.32809	950.7065
#2	50.64291	1.556419	12.67401	-11.4439	79.80864	935.2970
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-011-011-1/1 Operator: LCM
Run Time: 10/15/07 16:21:21
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18814.92	-2.02008	3.582819	39.86747	.6112766	.0056410	1843.407
#1	18856.43	-.601778	5.807858	39.98765	.5889487	.3811550	1854.274
#2	18773.42	-3.43838	1.357780	39.74728	.6336045	-.369873	1832.540
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	385.9444	19.06382	98.91026	241400.0	37.85634	1904.615	597.1671
#1	386.3263	19.42857	99.08433	242266.0	37.33319	1910.806	599.5860
#2	385.5625	18.69907	98.73618	240533.9	38.37949	1898.424	594.7481
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	NI	K	SE	AG	NA	TL	V
Avge	82.34619	481.7700	10.69533	-.769937	213.9356	1.185123	621.2773
#1	82.88448	486.4584	11.24940	-.537287	260.1789	1.837391	621.8420
#2	81.80790	477.0815	10.14125	-1.00259	167.6923	.5328560	620.7126
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	155.7465	-2.41325	1.536670	29.54603	49.62025	13558.56	36.54539
#1	155.7545	-1.30445	1.430040	30.69142	49.69897	13587.67	37.14083
#2	155.7385	-3.52205	1.643300	28.40065	49.54152	13529.46	35.94994
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	38.51144	4.757042	13.66414	-20.4152	55.15473	669.4692
#1	37.42897	6.965176	13.39119	-22.6076	51.12487	668.1051
#2	39.59390	2.548907	13.93710	-18.2227	59.18459	670.8333
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-012-012-1/1 Operator: LCM
Run Time: 10/15/07 16:30:36
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	22477.70	-2.44962	6.109726	36.34568	.6700200	-.462611	1199.831
#1	22234.36	-3.28687	3.505517	35.96088	.6352049	-.574625	1185.033
#2	22721.04	-1.61238	8.713936	36.73048	.7048351	-.350597	1214.630
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	367.0589	14.26131	86.36589	236384.2	27.52789	1439.927	568.9127
#1	363.0864	14.10028	85.28963	233929.6	26.79568	1422.813	562.6636
#2	371.0314	14.42233	87.44215	238838.8	28.26009	1457.041	575.1619
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	NI	K	SE	AG	NA	TL	V
Avge	71.28908	450.8331	11.24216	.1746458	315.8394	4.010300	537.2191
#1	70.19762	452.4853	10.86814	.4542355	361.0256	3.914772	532.0583
#2	72.38055	449.1809	11.61619	-.104944	270.6531	4.105827	542.3798
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	140.1822	-1.65455	2.365837	2.435038	39.03701	11954.22	31.03167
#1	138.4921	-1.54628	2.329294	2.590431	38.57921	11835.99	30.25675
#2	141.8723	-1.76282	2.402379	2.279644	39.49482	12072.45	31.80660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	25.77556	10.58588	11.56982	-14.0056	27.91166	647.4490
#1	25.06468	10.92036	10.84156	-13.8776	-1.93871	635.8068
#2	26.48644	10.25141	12.29809	-14.1335	57.76203	659.0911
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-014-014-1/1 Operator: LCM
Run Time: 10/15/07 16:39:51
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18581.72	-3.42531	6.216579	38.20856	.6425315	-.229033	1652.364
#1	18622.53	-1.10226	6.649536	38.35369	.6169113	-.109974	1653.761
#2	18540.92	-5.74836	5.783623	38.06342	.6681517	-.348093	1650.967
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	381.4283	17.58294	95.87172	241489.0	52.90252	1752.202	599.6872
#1	381.4723	17.76427	95.14794	241673.4	53.02864	1753.907	600.1947
#2	381.3844	17.40162	96.59551	241304.7	52.77639	1750.497	599.1797
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	NI	K	SE	AG	NA	TL	V
Avge	76.06590	395.2280	8.437140	-.904046	205.8584	.9736023	595.9944
#1	75.48628	395.5541	8.971284	-.691695	256.1215	.3530159	593.3558
#2	76.64552	394.9020	7.902997	-1.11640	155.5953	1.594189	598.6329
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	153.9582	-2.25084	3.377954	3.386446	50.89440	13251.92	53.75338
#1	153.8088	-2.47572	3.565025	2.393496	51.10849	13193.06	53.59010
#2	154.1076	-2.02596	3.190883	4.379396	50.68031	13310.77	53.91666
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	52.47669	3.261631	11.02457	-16.2946	66.44774	775.7206
#1	52.74743	4.837355	11.03793	-18.6623	42.88409	774.7604
#2	52.20594	1.685908	11.01121	-13.9270	90.01140	776.6807
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-015-015-1/1 Operator: LCM
Run Time: 10/15/07 16:49:25
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	26449.65	-2.32424	8.267944	32.66076	.4444841	.2445078	560.6605
#1	26876.59	-1.35786	9.637438	33.19296	.4112738	.3369122	569.1699
#2	26022.71	-3.29062	6.898451	32.12857	.4776943	.1521034	552.1511
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	410.7106	15.93115	102.2551	230794.0	29.15498	1201.363	667.6158
#1	416.9495	16.10230	104.7886	234363.5	29.46877	1222.706	677.6406
#2	404.4716	15.76001	99.72150	227224.5	28.84120	1180.020	657.5910
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	NI	K	SE	AG	NA	TL	V
Avge	68.70505	474.3394	10.46868	-.286751	143.9548	5.728279	625.6183
#1	69.39330	484.2421	10.67832	-.062656	83.64188	6.705063	639.4148
#2	68.01679	464.4368	10.25905	-.510846	204.2677	4.751495	611.8219
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	159.7848	-3.40041	2.618212	4.324125	27.75026	13460.84	29.55725
#1	161.3404	-4.17096	2.530188	5.751493	28.17825	13746.48	31.20210
#2	158.2292	-2.62985	2.706236	2.896757	27.32228	13175.20	27.91241
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	28.95343	6.339182	12.53303	-17.4011	67.65266	843.0579
#1	28.60162	4.395779	13.81927	-18.7466	71.24357	857.7551
#2	29.30523	8.282586	11.24680	-16.0556	64.06177	828.3605
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: CVCCV3 Operator: LCM
Run Time: 10/15/07 17:01:53
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51346.11	511.7827	513.2403	501.9962	50.04302	498.9138	100688.2
#1	51410.30	512.6861	515.5143	502.2683	50.27893	499.9208	100976.5
#2	51281.92	510.8793	510.9663	501.7240	49.80711	497.9067	100399.9
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	501.1445	498.0410	512.2921	49139.66	499.4489	101228.9	501.2292
#1	501.7051	498.7531	512.8561	49239.07	498.7142	101419.8	501.8102
#2	500.5840	497.3289	511.7281	49040.25	500.1836	101038.1	500.6483
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	NI	K	SE	AG	NA	TL	V
Avge	500.0414	Q77773.38	514.1914	523.0176	100025.2	504.3888	504.8813
#1	502.0834	Q77775.13	516.3164	523.0663	100242.4	504.4230	506.8080
#2	497.9995	Q77771.62	512.0664	522.9690	99807.95	504.3547	502.9548
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	493.4135	521.2541	506.3746	508.7821	507.5600	503.9476	495.3870
#1	492.9506	521.1030	504.2788	506.7361	508.2830	505.4127	494.8923
#2	493.8764	521.4052	508.4705	510.8280	506.8370	502.4825	495.8817
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	TE	ZR	SI
Avge	501.4795	518.8960	511.8386	511.5759	Q436.4549	535.0851
#1	500.6248	519.2953	514.8262	510.0266	Q442.6172	535.9904
#2	502.3341	518.4967	508.8509	513.1252	Q430.2926	534.1798
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB3 Operator: LCM
Run Time: 10/15/07 17:11:08
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	29.56381	-1.02308	-1.03234	.1977611	-.094615	.1862863	-.915363
#1	39.52707	-2.18714	.0239156	.3349203	-.092597	.2826639	15.86947
#2	19.60055	.1409768	-2.08859	.0606019	-.096634	.0899087	-17.7002
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2110478	-.042190	.1786743	23.84946	-.040318	43.55532	.1422453
#1	.2493384	.3082818	.6219820	32.75819	.2347962	64.45422	.2678229
#2	.1727573	-.392661	-.264633	14.94073	-.315433	22.65643	.0166678
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	NI	K	SE	AG	NA	TL	V
Avge	.9078652	46.74544	3.664371	-.717406	-72.8578	1.382403	.7911465
#1	.9690642	60.82611	2.355478	-.889460	-80.2443	1.518573	1.200665
#2	.8466662	32.66477	4.973264	-.545351	-65.4713	1.246233	.3816278
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.7365298	-.291121	1.237061	-.344642	.2011516	.5431699	.8789102
#1	.9243842	-.436372	1.486304	-1.74891	.3114883	.7999297	1.597302
#2	.5486754	-.145870	.9878182	1.059622	.0908149	.2864101	.1605185
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-.500410	7.772271	1.610045	3.090650	-40.4564	1.648834
#1	-.446934	5.168841	.9484000	-.574046	-37.7468	2.637176
#2	-.553885	10.37570	2.271691	6.755346	-43.1661	.6604924
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: S 710030-016-016-1/1 Operator: LCM
Run Time: 10/15/07 17:20:24
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	43348.33	-.978872	9.199314	32.02625	.5788615	-.035880	573.7584
#1	43382.61	-1.19937	8.307083	32.08774	.5807779	.1325703	578.8231
#2	43314.04	-.758372	10.09154	31.96475	.5769450	-.204330	568.6938
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	329.6947	11.41587	83.90254	192269.1	20.92645	896.5865	676.2468
#1	331.4180	11.47721	84.30834	193008.8	21.40412	897.9822	678.4658
#2	327.9714	11.35454	83.49674	191529.5	20.44878	895.1908	674.0278
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	NI	K	SE	AG	NA	TL	V
Avge	88.45669	530.5868	12.37361	-.598752	163.1478	2.436745	367.6022
#1	89.34029	536.6198	12.81981	-.166346	204.7006	-.440296	370.0916
#2	87.57309	524.5537	11.92742	-1.03116	121.5950	5.313786	365.1127
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	115.8363	-.154366	2.935711	1.820839	27.11097	7572.118	20.22943
#1	115.9531	-.024086	2.512943	1.337851	27.15488	7630.346	19.51186
#2	115.7195	-.284646	3.358478	2.303828	27.06705	7513.891	20.94700
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	21.27453	11.19654	12.96168	-10.6858	20.20453	934.1888
#1	22.34987	13.80218	12.32813	-10.8551	-16.6600	936.7022
#2	20.19918	8.590892	13.59524	-10.5166	57.06905	931.6755
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-017-017-1/1 Operator: LCM
Run Time: 10/15/07 17:29:53
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	15276.09	4.939010	1.072924	38.71688	.4524991	-.151800	550.1992
#1	15278.77	5.419549	1.030554	38.70650	.4964284	-.305119	546.0487
#2	15273.41	4.458471	1.115295	38.72726	.4085698	.0015183	554.3498
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	320.8306	19.72994	108.6987	224018.3	350.4852	1583.883	618.6765
#1	320.6989	19.75494	108.8123	223600.0	350.0557	1573.409	617.1439
#2	320.9624	19.70494	108.5850	224436.6	350.9147	1594.356	620.2091
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	NI	K	SE	AG	NA	TL	V
Avge	66.18832	226.6372	11.21926	.1692977	254.4945	2.525881	672.1764
#1	66.06941	223.6051	13.03208	.0317510	181.8536	-1.27607	671.7531
#2	66.30724	229.6694	9.406434	.3068445	327.1354	6.327827	672.5996
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	170.9134	-4.30469	4.446512	8.328522	27.68054	16217.05	346.8997
#1	171.1923	-4.78066	3.979595	8.388155	27.74321	16239.93	346.2627
#2	170.6345	-3.82873	4.913428	8.268888	27.61788	16194.17	347.5366
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	352.2775	7.209754	13.22360	-13.5126	66.09856	914.7894
#1	351.9518	8.969059	15.06318	-11.5544	72.21871	914.8344
#2	352.6033	5.450449	11.38402	-15.4708	59.97840	914.7445
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-018-018-1/1 Operator: LCM
Run Time: 10/15/07 17:39:24
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	22503.23	.5366726	6.080351	60.95722	.5483587	1.747221	1179.379
#1	22498.85	1.029998	5.886844	61.16763	.5277276	1.536190	1185.685
#2	22507.62	.0433474	6.273858	60.74682	.5689899	1.958252	1173.073
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	373.4124	13.90690	155.4346	264309.8	193.3158	1231.949	555.7115
#1	374.0183	13.91624	155.6362	264967.2	192.6446	1236.083	556.6894
#2	372.8064	13.89756	155.2329	263652.4	193.9870	1227.815	554.7337
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	NI	K	SE	AG	NA	TL	V
Avge	60.69393	349.3639	11.91139	.4967826	246.2123	2.270441	610.6752
#1	60.27396	354.5002	12.89131	.2424122	324.2471	.5857124	611.5904
#2	61.11390	344.2276	10.93147	.7511530	168.1776	3.955170	609.7600
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	345.2324	-2.86517	4.225131	9.528899	39.57293	13768.88	193.0093
#1	345.0010	-2.38125	4.545423	8.731579	39.67370	13787.81	192.5006
#2	345.4638	-3.34910	3.904840	10.32622	39.47215	13749.95	193.5179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	193.4686	7.239430	14.24696	-14.6596	70.70244	823.6655
#1	192.7161	6.844275	15.91442	-15.7597	68.90729	822.9955
#2	194.2212	7.634586	12.57951	-13.5595	72.49758	824.3354
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-019-019-1/1 Operator: LCM
Run Time: 10/15/07 17:48:59
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	31055.78	1.753426	4.913036	55.20205	.6018455	1.616320	1760.851
#1	31020.50	1.360580	5.696594	55.18918	.6213205	1.641462	1763.491
#2	31091.06	2.146272	4.129479	55.21492	.5823705	1.591177	1758.211
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	336.6096	16.71883	371.1213	267315.8	107.7438	1715.971	720.6305
#1	336.4783	16.45300	371.9208	267438.8	108.2128	1718.433	720.9603
#2	336.7410	16.98466	370.3218	267192.9	107.2748	1713.510	720.3007
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	NI	K	SE	AG	NA	TL	V
Avge	70.54112	453.2814	10.47061	1.354154	261.7004	1.841257	645.1810
#1	70.43687	452.6791	10.71784	1.721614	316.5911	1.185310	647.1600
#2	70.64539	453.8836	10.22339	.9866948	206.8096	2.497204	643.2021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	248.8953	-2.66028	3.727196	28.72412	50.32091	15455.41	106.9915
#1	249.1792	-2.48091	3.858588	25.87236	50.40530	15496.66	108.2912
#2	248.6113	-2.83964	3.595804	31.57588	50.23652	15414.16	105.6918
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	108.1196	3.792521	13.80918	-18.7934	79.10740	896.7510
#1	108.1732	7.381603	12.38547	-21.7790	85.47572	893.8934
#2	108.0659	.2034397	15.23288	-15.8078	72.73908	899.6086
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-020-020-1/1 Operator: LCM
Run Time: 10/15/07 17:58:14
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	17483.06	-2.33705	1.550647	43.65618	.4151281	.2794867	909.0005
#1	17471.90	-2.46122	2.507993	43.55702	.4543929	.2698612	908.3862
#2	17494.23	-2.21287	.5933001	43.75534	.3758633	.2891121	909.6149
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	342.6441	22.39916	103.8551	220309.2	33.27409	1803.450	685.0187
#1	342.6965	22.35836	104.5135	220348.5	33.82907	1807.066	685.7288
#2	342.5917	22.43996	103.1967	220270.0	32.71912	1799.835	684.3085
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	NI	K	SE	AG	NA	TL	V
Avge	68.33907	237.2779	10.03556	-.197301	312.1719	6.175808	656.7001
#1	68.13191	238.5738	10.12562	-.115813	399.9907	8.443142	657.0217
#2	68.54622	235.9820	9.945496	-.278790	224.3531	3.908474	656.3785
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	169.2819	-4.59713	3.218935	5.237788	32.09483	15955.95	33.02594
#1	168.8221	-4.33766	3.111543	7.329521	32.02901	15966.05	34.32796
#2	169.7417	-4.85660	3.326327	3.146055	32.16066	15945.85	31.72392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	33.39777	7.224499	11.44070	-15.1048	64.36167	675.3691
#1	33.57915	6.229706	12.07321	-13.6391	68.66464	675.2062
#2	33.21640	8.219292	10.80820	-16.5706	60.05870	675.5320
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-021-021-1/1 Operator: LCM
Run Time: 10/15/07 18:07:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	34496.56	-1.37356	4.714223	61.12650	.7130277	.5552893	895.1030
#1	34535.26	-2.07592	3.566232	61.11814	.7663526	.7212658	894.6510
#2	34457.86	-.671195	5.862214	61.13486	.6597028	.3893127	895.5550
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	386.7278	14.50597	98.57658	234049.6	38.22015	1234.736	637.3079
#1	386.7501	14.23246	98.75535	234164.9	37.34659	1238.645	637.6157
#2	386.7054	14.77947	98.39781	233934.4	39.09372	1230.827	637.0002
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	NI	K	SE	AG	NA	TL	V
Avge	81.34815	565.1622	7.712369	-.496494	135.6146	.5052929	540.8202
#1	80.63671	566.7014	7.889198	-.840316	183.9381	.2136345	542.8214
#2	82.05959	563.6230	7.535541	-.152672	87.29099	.7969513	538.8191
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	168.9837	-2.32767	2.134935	8.000269	59.74793	11202.36	36.19914
#1	168.9552	-2.48637	1.962827	8.318678	59.77050	11231.58	34.96064
#2	169.0123	-2.16898	2.307043	7.681859	59.72535	11173.14	37.43764
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	39.23032	3.377951	9.879196	-10.1509	50.66363	644.8943
#1	38.53921	8.103450	7.781792	-8.82867	59.24912	644.4792
#2	39.92143	-1.34755	11.97660	-11.4732	42.07814	645.3093
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: BLK100777 Operator: LCM
Run Time: 10/15/07 18:19:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	H573.1097	2.101907	-4.05170	H41.06068	-.081762	-.109154	H1336.924
#1	H575.7836	1.451183	-4.06085	H41.08375	-.062079	-.144770	H1334.611
#2	H570.4358	2.752631	-4.04256	H41.03761	-.101445	-.073537	H1339.237
Errors	LC High	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC High
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	2.024309	-1.26883	.5245385	H87.75263	1.348802	117.8839	.9241438
#1	1.851333	-1.10378	.3724170	H87.73979	.9699899	110.4571	.8577831
#2	2.197285	-1.43388	.6766599	H87.76547	1.727614	H125.3107	.9905046
Errors	LC Pass	LC Pass	LC Pass	LC High	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	NI	K	SE	AG	NA	TL	V
Avge	-4.37412	44.14988	-.068540	-.844430	612.3380	-4.13032	1.479878
#1	L-5.05598	55.11258	-.330803	-1.15652	711.4870	-3.56226	2.428139
#2	-3.69226	33.18718	.1937240	-.532336	513.1890	-4.69838	.5316163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	125.0000	10.00000	2.500000	1250.000	15.00000	5.000000
Low	-5.00000	-125.000	-10.0000	-2.50000	-1250.00	-15.0000	-5.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	H28.63424	H64.50695	-.084938	H25.95417	H24.87142	4.149037	3.329306
#1	H28.30323	H64.35163	-.634513	H26.07092	H24.87984	4.723127	2.299885
#2	H28.96525	H64.66227	.4646378	H25.83741	H24.86299	3.574948	4.358727
Errors	LC High	LC High	LC Pass	LC High	LC High	LC Pass	NOCHECK
High	10.00000	7.500000	2.500000	12.50000	5.000000	12.50000	
Low	-10.0000	-7.50000	-2.50000	-12.5000	-5.00000	-12.5000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	.3580602	-14.7868	7.290105	-23.6143	-23.6413	21.77736
#1	.3045504	-15.9978	7.502189	-26.1155	-14.1911	22.44405
#2	.4115701	-13.5759	7.078021	-21.1131	-33.0915	21.11066
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						50.00000
Low						-50.0000

Method: TRACE1 Sample Name: BKS100777 Operator: LCM
Run Time: 10/15/07 18:28:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10169.15	101.5881	97.58396	1023.624	51.13117	101.9413	10301.38
#1	10229.10	102.1620	95.97038	1027.620	51.09307	101.9715	10320.16
#2	10109.19	101.0142	99.19754	1019.629	51.16927	101.9112	10282.60
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
Avge	520.9154	497.3878	518.4893	9979.182	990.8683	9823.684	1014.671
#1	522.6442	498.8825	519.3478	10010.88	990.7274	9848.892	1017.114
#2	519.1867	495.8930	517.6307	9947.483	991.0091	9798.475	1012.228
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	NI	K	SE	AG	NA	TL	V
Avge	505.6470	8817.159	94.94665	101.5296	9888.188	96.32677	522.3962
#1	506.9388	8889.861	94.36476	101.5996	10152.81	93.74578	523.0441
#2	504.3553	8744.457	95.52853	101.4596	9623.561	98.90777	521.7484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1016.213	987.3281	510.0972	530.7462	1033.740	2022.435	989.3944
#1	1018.130	992.0396	511.5277	534.3346	1039.256	2023.004	995.1812
#2	1014.297	982.6166	508.6666	527.1579	1028.225	2021.866	983.6076
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	991.6049	84.99221	99.92352	350.1534	354.7423	8339.568
#1	988.5002	87.50441	97.79462	356.3759	372.5389	8377.999
#2	994.7094	82.48001	102.0524	343.9310	336.9458	8301.139
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						12000.00
Low						8000.000

Method: TRACE1 Sample Name: CVCCV3 Operator: LCM
Run Time: 10/15/07 18:41:24
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51563.49	515.2670	516.2910	503.3007	50.22010	499.1062	100806.3
#1	51573.31	514.1333	520.2198	503.3802	50.37275	498.8518	100948.5
#2	51553.67	516.4008	512.3622	503.2212	50.06744	499.3606	100664.1
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	502.2602	499.8088	515.5776	49231.44	504.3703	101684.2	502.3599
#1	503.3551	500.1044	517.1560	49303.80	505.3472	101731.0	503.1959
#2	501.1654	499.5132	513.9992	49159.10	503.3934	101637.5	501.5238
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	NI	K	SE	AG	NA	TL	V
Avge	500.8140	Q77581.80	519.0889	525.7290	100419.1	506.3861	506.5143
#1	502.4266	Q77457.23	516.6633	527.3373	100420.2	502.8047	508.6728
#2	499.2015	Q77706.38	521.5144	524.1207	100418.1	509.9675	504.3557
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	496.9189	525.6014	509.6462	511.9542	509.1658	505.7890	497.5765
#1	498.3559	525.5575	509.6597	512.3997	508.8329	508.0078	500.0406
#2	495.4819	525.6454	509.6327	511.5088	509.4987	503.5702	495.1125
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	TE	ZR	SI
Avge	507.7668	528.1156	514.5751	521.1911	Q437.3888	536.3373
#1	508.0002	530.1230	509.9331	523.5497	Q431.5999	535.2581
#2	507.5335	526.1083	519.2172	518.8325	Q443.1777	537.4166

Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB3 Operator: LCM
Run Time: 10/15/07 18:50:59
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	20.30279	-1.54133	-3.51198	.1915687	-.057808	.3803133	6.709524
#1	27.48989	-2.11640	-2.00484	.2346999	-.055503	.3873242	16.44941
#2	13.11568	-.966254	-5.01912	.1484375	-.060114	.3733023	-3.03036
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0661708	-.153619	.0786959	25.02799	-.949802	39.49262	.1672758
#1	.3702117	-.169834	-.169204	35.92903	-1.25824	50.17291	.2181363
#2	-.237870	-.137404	.3265957	14.12694	-.641364	28.81232	.1164153
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	NI	K	SE	AG	NA	TL	V
Avge	.7267309	41.04726	2.335473	-.222006	-83.6060	5.320235	.1775398
#1	.9363348	52.83708	1.295222	-.448900	-69.3622	5.405160	.0442239
#2	.5171271	29.25745	3.375723	.0048877	-97.8499	5.235311	.3108557
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1.061951	.1777872	1.060562	-.843551	.2052220	.1442734	1.499389
#1	1.320221	.9515249	2.041580	-.394782	.2644911	.2177808	-.099502
#2	.8036820	-.595950	.0795441	-1.29232	.1459529	.0707659	3.098279
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-2.17487	6.822996	.0913388	1.603867	-18.0043	-1.57148
#1	-1.83808	7.788433	-1.95177	5.410084	-18.3880	-3.03991
#2	-2.51166	5.857558	2.134452	-2.20235	-17.6207	-.103048
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: S 710030-022-022-1/1 Operator: LCM
Run Time: 10/15/07 19:00:15
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	34303.88	-2.22820	8.557253	81.32613	.6071512	.2028723	908.4860
#1	35588.29	-3.83785	9.586084	84.38468	.6939094	.3570824	938.8084
#2	33019.46	-.618549	7.528420	78.26756	.5203930	.0486622	878.1636
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	365.5073	17.73043	98.07089	222831.8	29.27469	1482.196	806.8987
#1	378.4545	18.17445	101.3584	230592.8	29.53889	1535.503	835.9319
#2	352.5602	17.28640	94.78336	215070.9	29.01048	1428.889	777.8656
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	NI	K	SE	AG	NA	TL	V
Avge	93.89621	491.5703	12.75628	.1696678	178.2865	4.079937	556.6174
#1	96.57533	510.2107	11.19911	.1981499	200.1355	.9344902	575.2270
#2	91.21708	472.9300	14.31344	.1411857	156.4374	7.225384	538.0077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	164.8765	-2.74790	2.667041	4.264760	54.75425	12741.95	22.93686
#1	172.1732	-3.20124	2.764037	3.255989	56.82395	13186.88	27.20451
#2	157.5798	-2.29457	2.570044	5.273531	52.68455	12297.02	18.66921
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	32.44324	3.496191	17.38582	-17.0694	69.22119	625.3134
#1	30.70567	4.402781	14.59691	-19.9086	82.06712	658.5329
#2	34.18080	2.589602	20.17472	-14.2302	56.37527	592.0938
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: SP710030-022-022-1/1 Operator: LCM
Run Time: 10/15/07 19:09:31
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	42248.19	3.864240	16.18453	205.4722	5.660053	10.69459	1894.651
#1	42277.56	4.604816	16.29840	205.8102	5.640484	11.01479	1901.483
#2	42218.83	3.123663	16.07067	205.1343	5.679622	10.37439	1887.819
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	425.2661	68.14754	152.1161	225503.3	130.9947	2608.516	914.9285
#1	426.5272	68.51283	152.0511	226189.9	130.7176	2616.425	917.2673
#2	424.0049	67.78224	152.1810	224816.7	131.2718	2600.606	912.5898
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	NI	K	SE	AG	NA	TL	V
Avge	159.7335	1515.968	16.05052	10.48586	1182.814	12.85206	618.5775
#1	161.6326	1518.784	15.34062	10.51803	1181.595	11.15742	620.5610
#2	157.8345	1513.152	16.76041	10.45369	1184.034	14.54669	616.5940
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	273.9481	94.90596	44.86527	50.52045	196.2561	13348.89	129.5693
#1	273.3172	95.61867	44.17501	48.76622	196.4304	13386.44	129.7219
#2	274.5791	94.19325	45.55553	52.27467	196.0817	13311.35	129.4167
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	131.7071	11.79948	18.17572	18.05358	119.3436	909.7418
#1	131.2152	13.04846	16.48638	16.64285	120.8253	913.1344
#2	132.1989	10.55050	19.86505	19.46431	117.8619	906.3492
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: SD710030-022-022-1/1 Operator: LCM
Run Time: 10/15/07 19:18:46
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	46768.02	3.406812	14.64365	218.9522	5.946081	10.84204	2004.337
#1	46763.94	3.479464	15.59480	218.8138	6.023366	10.72569	1998.566
#2	46772.11	3.334160	13.69249	219.0906	5.868795	10.95840	2010.108
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	457.6404	72.32869	164.3266	244135.9	138.5258	2793.686	1000.604
#1	456.7918	72.13457	164.3195	243703.9	139.2822	2789.246	998.8705
#2	458.4889	72.52280	164.3337	244567.9	137.7694	2798.126	1002.337
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	NI	K	SE	AG	NA	TL	V
Avge	172.6565	1613.545	17.27446	10.88991	1296.211	12.73285	663.4847
#1	172.0958	1617.841	15.72075	10.47853	1270.946	12.65560	663.3215
#2	173.2171	1609.249	18.82817	11.30129	1321.476	12.81010	663.6480
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	291.9826	98.37736	47.22676	54.05690	208.5391	14362.74	136.5299
#1	290.8596	97.75628	47.35837	53.44373	208.7398	14376.59	137.1250
#2	293.1055	98.99844	47.09515	54.67007	208.3385	14348.89	135.9348
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	139.5233	12.80214	19.51029	20.17898	135.3339	948.7792
#1	140.3603	12.41439	17.37360	19.45991	137.3639	948.9107
#2	138.6863	13.18990	21.64698	20.89804	133.3039	948.6478
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: PS710030-022-022-1/1 Operator: LCM
Run Time: 10/15/07 19:28:20
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	36976.01	80.40520	96.15602	106.5290	10.92625	21.86491	6005.844
#1	40147.45	82.00252	91.00833	114.4614	10.92960	21.31240	6050.207
#2	33804.56	78.80788	101.3037	98.59660	10.92289	22.41741	5961.482
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	399.7114	48.20319	140.9070	233491.7	114.9463	6769.315	922.9581
#1	433.4984	50.29837	143.8147	253704.7	117.0343	6808.565	996.2453
#2	365.9243	46.10801	137.9994	213278.7	112.8584	6730.065	849.6710
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	NI	K	SE	AG	NA	TL	V
Avge	139.4242	5385.800	86.50867	50.44168	4893.281	120.2655	612.9536
#1	146.8276	5474.343	83.78881	51.08870	5202.875	103.6046	653.6844
#2	132.0208	5297.257	89.22852	49.79465	4583.686	136.9264	572.2228
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	248.1112	69.62755	34.30537	106.4435	78.70829	13516.25	101.6261
#1	265.4186	70.56114	34.87178	108.9690	83.73046	14430.88	114.5232
#2	230.8037	68.69395	33.73896	103.9180	73.68612	12601.61	88.72900
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	121.6059	62.24395	98.64066	481.5656	614.3026	5899.918
#1	118.2893	79.76775	85.79900	493.9015	608.7728	5929.962
#2	124.9224	44.72015	111.4823	469.2298	619.8323	5869.875
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: SE710030-022-022-1/1 Operator: LCM
Run Time: 10/15/07 19:37:36
Comment: UG/L 50
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	6598.527	-2.88048	-.819751	15.48620	.0684023	.0617147	137.8553
#1	6803.265	-5.16092	-.549587	15.91069	.1113049	.0593328	138.7185
#2	6393.790	-.600043	-1.08992	15.06172	.0254997	.0640964	136.9920
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	70.53409	3.291328	18.78455	42814.79	5.944058	288.3839	155.9320
#1	72.19499	2.832538	20.04303	44078.03	6.378602	296.1994	160.6967
#2	68.87318	3.750119	17.52606	41551.54	5.509516	280.5684	151.1672
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	NI	K	SE	AG	NA	TL	V
Avge	18.96880	91.85884	4.211476	-.555901	-4.61289	2.789429	109.5650
#1	19.52054	88.58630	2.162103	-.860271	-86.1105	3.946287	115.2723
#2	18.41707	95.13139	6.260849	-.251532	76.88475	1.632571	103.8577
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	33.36574	-.722569	.6971645	-.783931	10.46841	2503.760	5.790278
#1	33.51492	-1.17480	.4367580	-.689839	10.80324	2641.958	3.995253
#2	33.21656	-.270335	.9575710	-.878022	10.13359	2365.561	7.585303
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	6.020553	2.564557	5.034458	.7919645	-9.06140	120.0681
#1	7.569957	-1.23979	3.862569	-3.63530	-1.14807	125.5539
#2	4.471148	6.368901	6.206347	5.219229	-16.9747	114.5822
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-023-023-1/1 Operator: LCM
Run Time: 10/15/07 19:46:51
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	46399.78	-.108213	7.543590	74.32513	.6641548	.6937656	1649.728
#1	46733.41	1.299291	8.359139	74.72578	.6377215	.7201004	1664.946
#2	46066.15	-1.51572	6.728041	73.92449	.6905880	.6674309	1634.510
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	324.5247	13.75277	103.7778	213172.6	58.33046	1464.421	683.3821
#1	326.7343	13.97315	104.7482	214743.1	59.29473	1476.477	688.2111
#2	322.3150	13.53240	102.8074	211602.0	57.36620	1452.364	678.5532
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	NI	K	SE	AG	NA	TL	V
Avge	107.5165	542.3212	8.767811	.1977931	109.4155	1.059790	487.3378
#1	108.2207	549.0764	7.848825	-.121145	277.2577	1.331657	491.6217
#2	106.8122	535.5660	9.686796	.5167307	-58.4266	.7879219	483.0538
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	146.1973	-1.29037	2.430110	7.650612	60.97447	10994.68	57.48232
#1	147.5452	-1.79067	2.379999	10.13100	61.28669	11096.87	57.23864
#2	144.8494	-.790068	2.480221	5.170227	60.66225	10892.49	57.72601
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	58.75414	6.351466	9.975563	-17.3291	84.59113	684.8910
#1	60.32238	2.283441	10.63107	-15.2733	86.06669	688.6447
#2	57.18590	10.41949	9.320053	-19.3849	83.11556	681.1374
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-024-024-1/1 Operator: LCM
Run Time: 10/15/07 19:56:07
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	33253.06	-1.90676	7.215334	83.10986	.5306470	.3896332	1286.889
#1	35058.82	-1.67617	6.591615	87.70617	.4960260	.0748386	1356.433
#2	31447.29	-2.13736	7.839053	78.51354	.5652679	.7044277	1217.345
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	329.0366	14.16542	97.11740	206450.1	36.29801	1387.993	730.9010
#1	346.6797	14.85902	103.1324	217782.4	38.45929	1463.327	769.6754
#2	311.3934	13.47181	91.10239	195117.8	34.13673	1312.659	692.1266
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	NI	K	SE	AG	NA	TL	V
Avge	87.63863	445.3030	9.040661	.2769726	-25.6002	5.164843	503.2961
#1	92.48209	478.0940	9.743225	.7557924	188.1542	4.511162	530.8982
#2	82.79516	412.5119	8.338098	-.201847	-239.355	5.818523	475.6940
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	157.1293	-2.44387	1.872846	3.594998	67.86164	10860.24	34.05185
#1	163.7231	-2.82289	1.987032	4.478602	71.66193	11482.96	37.50372
#2	150.5356	-2.06486	1.758661	2.711393	64.06135	10237.52	30.59998
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	37.42075	.5609496	13.28009	-19.0271	44.41799	525.4922
#1	38.93672	4.029941	12.59939	-23.2129	36.69041	562.9467
#2	35.90479	-2.90804	13.96080	-14.8413	52.14558	488.0377
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-025-025-1/1 Operator: LCM
Run Time: 10/15/07 20:05:41
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	29346.59	-4.07612	8.746778	59.67097	.5382206	.4216890	326.5768
#1	29620.10	-4.35184	7.447751	60.35592	.5140641	.4871082	330.6926
#2	29073.07	-3.80039	10.04581	58.98602	.5623772	.3562698	322.4611
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	336.7668	12.75749	85.82798	247709.5	27.53286	1227.930	483.4959
#1	338.2024	13.17415	87.46347	249387.6	27.70274	1234.356	487.2401
#2	335.3313	12.34083	84.19249	246031.4	27.36298	1221.504	479.7518
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	NI	K	SE	AG	NA	TL	V
Avge	65.82611	365.7361	13.87104	.0921577	90.96709	3.010315	549.2310
#1	66.52440	370.8350	17.12924	-.260544	77.93516	1.121632	555.3147
#2	65.12783	360.6372	10.61283	.4448590	103:9990	4.898998	543.1472
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	128.0729	-3.25317	3.200511	3.708909	64.35733	12126.37	25.87604
#1	128.3332	-3.55155	3.629222	3.379524	64.89659	12243.25	26.65034
#2	127.8126	-2.95479	2.771799	4.038294	63.81808	12009.49	25.10174
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	28.36080	12.57204	14.52010	-20.1067	67.57040	573.6179
#1	28.22831	15.39784	17.99447	-22.5897	65.19734	586.3317
#2	28.49329	9.746242	11.04573	-17.6237	69.94345	560.9042
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: IAICSAI Operator: LCM
Run Time: 10/15/07 20:18:11
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	494307.5	-4.12836	-2.98814	.8912313	.3598755	2.859733	513275.0
#1	494027.4	-1.79051	-3.06855	.8635564	.3468026	2.948097	513893.9
#2	494587.6	-6.46620	-2.90772	.9189062	.3729483	2.771368	512656.1
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	100000.0	10.00000	10.00000	2.500000	1.000000	5.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.881265	Q2.563973	2.170025	189821.6	4.026086	504998.6	Q12.54196
#1	1.967005	2.423274	2.084117	189641.7	4.373323	505061.2	Q12.57075
#2	1.795524	Q2.704671	2.255933	190001.5	3.678848	504936.0	Q12.51317
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	2.500000	2.500000	5.000000	40000.00	5.000000	100000.0	2.500000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.196601	-4.31382	3.120827	-.591498	-79.1910	-3.04744	1.335862
#1	3.489742	-5.72791	5.095604	-.935691	-112.608	.7851219	1.333247
#2	2.903461	-2.89972	1.146049	-.247304	-45.7736	-6.88000	1.338477
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	125.0000	10.00000	2.500000	1250.000	15.00000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	Q24.66014	.7287883	-1.70280	-1.50095	Q4.319175	2.748742	-13.2934
#1	Q24.49314	1.443727	-1.53929	-4.14271	Q4.326769	3.060945	-15.4179
#2	Q24.82714	.0138493	-1.86631	1.140806	Q4.311580	2.436539	-11.1690
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	7.500000	2.500000	12.50000	2.500000	12.50000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	12.68528	15.26161	-2.94994	-18.9905	-22.9369	Q38.42208
#1	14.26824	16.40419	-.559059	-15.5726	-37.1192	Q36.56600
#2	11.10232	14.11903	-5.34081	-22.4085	-8.75455	Q40.27816
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value						.0000000
Range						25.00000

Method: TRACE1 Sample Name: IBICSABI Operator: LCM
Run Time: 10/15/07 20:27:27
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	488429.5	618.5459	98.47658	512.6924	477.8809	929.8695	501111.5
#1	487398.1	618.5054	94.63306	512.3234	477.6185	927.2323	499525.2
#2	489461.0	618.5863	102.3201	513.0615	478.1434	932.5067	502697.8
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	478.3766	465.6457	535.7201	187231.3	52.20847	497077.2	492.5790
#1	476.2804	464.2971	535.6643	186581.3	52.45565	495567.5	490.9791
#2	480.4728	466.9943	535.7759	187881.3	51.96129	498587.0	494.1788
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	NI	K	SE	AG	NA	TL	V
Avge	932.9689	5312.000	57.20110	213.7226	10595.45	96.98863	492.1218
#1	929.6983	5317.027	58.90167	213.5288	10560.23	95.06409	492.9395
#2	936.2394	5306.973	55.50054	213.9163	10630.67	98.91317	491.3041
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	10000.00	100.0000	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	918.1654	1047.038	983.1770	1001.389	516.6114	975.3533	35.60784
#1	917.9411	1043.209	976.7224	993.0511	515.9448	974.4966	38.20596
#2	918.3898	1050.867	989.6317	1009.727	517.2781	976.2098	33.00972
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000	500.0000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	60.50834	73.23251	49.18498	173.3694	Q171.7087	Q1367.573
#1	59.57999	72.77743	51.96333	172.7726	Q170.3014	Q1360.454
#2	61.43668	73.68758	46.40662	173.9662	Q173.1159	Q1374.692

Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Fail
Value				200.0000	400.0000	1000.000
Range				20.00000	20.00000	20.00000

Method: TRACE1 Sample Name: CVCCV3 Operator: LCM
Run Time: 10/15/07 20:36:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51331.07	510.4699	512.3196	501.6785	49.90780	494.8541	98673.01
#1	51184.50	511.4860	512.5897	499.4839	49.87062	496.3790	98836.50
#2	51477.65	509.4538	512.0494	503.8732	49.94497	493.3292	98509.52
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	499.1402	495.4405	513.2490	48934.55	498.7291	100519.6	499.4388
#1	500.1783	496.4934	513.5903	48967.63	500.0387	100710.6	499.6343
#2	498.1021	494.3878	512.9078	48901.46	497.4196	100328.6	499.2433
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	NI	K	SE	AG	NA	TL	V
Avge	499.1798	Q77135.40	515.2407	520.4109	99564.47	507.5183	505.5315
#1	499.5107	Q76586.98	515.5264	520.4642	99112.48	507.5998	504.5684
#2	498.8488	Q77683.81	514.9550	520.3577	100016.5	507.4367	506.4945
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	486.8074	521.9890	507.3497	508.7169	507.4589	503.2843	494.1078
#1	488.5201	522.9436	507.6327	509.5485	506.8489	503.4517	493.4495
#2	485.0947	521.0344	507.0668	507.8852	508.0688	503.1169	494.7662
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	TE	ZR	SI
Avge	501.0394	519.3423	513.1895	509.8489	468.1759	535.4055
#1	503.3329	517.6286	514.4750	515.5325	465.9244	535.3663
#2	498.7458	521.0559	511.9040	504.1652	470.4273	535.4448
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB3 Operator: LCM
Run Time: 10/15/07 20:45:59
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41.75393	-2.55428	-4.88542	.1968655	-.111413	.0787988	10.38869
#1	49.85419	-4.56081	-4.11693	.1334397	-.082212	-.021768	21.92430
#2	33.65366	-.547749	-5.65391	.2602912	-.140615	.1793657	-1.14692
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1235138	-.128665	-.095746	18.06174	-.474633	54.84946	.0849225
#1	-.170835	-.605046	-.110920	14.37889	-.537436	65.99332	.0338146
#2	.4178630	.3477153	-.080572	21.74459	-.411831	43.70560	.1360304
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	NI	K	SE	AG	NA	TL	V
Avge	1.308145	33.35830	1.470859	-.436910	-73.6791	3.551156	.7811998
#1	1.751930	25.85798	4.763984	-.361606	-196.427	4.137586	.5113320
#2	.8643596	40.85862	-1.82227	-.512213	49.06842	2.964725	1.051068
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.6815555	.2051307	1.289225	-1.19235	.1624311	.2221885	1.528174
#1	.4221911	-.027899	1.420416	-1.47757	.1599900	.2619107	1.112874
#2	.9409199	.4381604	1.158033	-.907133	.1648722	.1824662	1.943474
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-1.47651	6.175335	-.881767	7.140755	-39.6796	.9036055
#1	-1.36306	7.332486	3.479267	5.474941	-36.5663	-.687107
#2	-1.58995	5.018185	-5.24280	8.806568	-42.7929	2.494318
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: S 710030-026-026-1/1 Operator: LCM
Run Time: 10/15/07 20:55:33
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	21485.04	-2.91022	4.277879	27.67984	.6222889	.0755424	416.2370
#1	21563.22	-2.99446	5.314846	27.82318	.6541221	-.138561	415.4218
#2	21406.87	-2.82598	3.240911	27.53650	.5904556	.2896461	417.0521
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	362.8274	12.40054	76.84817	251844.2	21.85682	1029.386	431.8344
#1	363.8354	12.38236	78.05127	252318.0	21.04919	1035.106	432.8288
#2	361.8194	12.41872	75.64507	251370.5	22.66446	1023.666	430.8400
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	NI	K	SE	AG	NA	TL	V
Avge	67.95033	394.3879	10.38744	-.127671	176.5864	1.102295	563.1715
#1	67.51195	397.4599	8.680939	-.213286	182.4924	1.462357	567.1548
#2	68.38872	391.3158	12.09395	-.042056	170.6804	.7422333	559.1883
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	121.9262	-2.15224	2.106325	5.992928	27.84610	12004.02	23.76215
#1	121.9544	-2.72332	2.212767	8.114386	28.21019	12073.83	22.70663
#2	121.8979	-1.58116	1.999882	3.871469	27.48201	11934.20	24.81768
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	20.90376	10.75329	10.20422	-9.13090	65.58432	708.3114
#1	20.22014	8.292637	8.874809	-10.0525	81.16414	707.7746
#2	21.58738	13.21394	11.53363	-8.20927	50.00449	708.8482
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-027-027-1/1 Operator: LCM
Run Time: 10/15/07 21:04:49
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	37284.51	-2.98929	9.081522	32.66740	.6420485	.9312878	371.7678
#1	38947.70	-.804382	11.97481	34.25594	.7203025	.9485912	388.3478
#2	35621.32	-5.17419	6.188231	31.07886	.5637946	.9139843	355.1878
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	384.2409	8.580537	76.76871	265090.6	25.22952	801.6926	442.7274
#1	401.2843	9.233406	80.48506	277297.9	26.08399	841.7736	462.7024
#2	367.1975	7.927668	73.05235	252883.2	24.37505	761.6117	422.7524
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	NI	K	SE	AG	NA	TL	V
Avge	68.43732	494.4734	15.70515	-.080987	-38.4210	1.711191	506.2668
#1	71.78746	523.7176	17.21360	-.649168	108.0472	4.178989	529.5451
#2	65.08717	465.2292	14.19671	.4871929	-184.889	-.756607	482.9885
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	111.4963	-3.21661	2.762286	4.298331	29.50839	11067.57	23.00711
#1	115.8927	-2.68860	3.252591	6.587915	30.85839	11583.90	21.65925
#2	107.1000	-3.74462	2.271982	2.008747	28.15839	10551.25	24.35496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	26.34034	8.948651	19.08296	-19.8043	85.01187	564.0670
#1	28.29595	8.450289	21.59484	-21.7759	99.24466	603.9255
#2	24.38473	9.447014	16.57108	-17.8328	70.77909	524.2086
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-028-028-1/1 Operator: LCM
Run Time: 10/15/07 21:14:05
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19924.87	-2.24379	4.603128	31.99835	.6714696	.5446119	578.7965
#1	20602.41	-1.22184	4.705016	33.38871	.7047104	.8014298	599.2468
#2	19247.33	-3.26574	4.501239	30.60800	.6382288	.2877941	558.3463
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	410.7454	15.33230	92.70696	262442.0	24.11725	1275.914	514.7069
#1	423.6835	15.94933	95.87302	270949.1	24.51794	1319.335	531.0874
#2	397.8073	14.71527	89.54091	253935.0	23.71656	1232.493	498.3263
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	NI	K	SE	AG	NA	TL	V
Avge	76.44911	362.6686	10.89601	-.132717	55.13698	4.549774	618.3948
#1	78.71332	386.2031	12.87495	-.468905	111.4270	7.912250	639.2851
#2	74.18490	339.1341	8.917064	.2034714	-1.15303	1.187298	597.5045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	138.9853	-2.43317	2.845651	4.559837	31.84233	13304.24	23.94306
#1	143.4355	-2.74891	2.411839	5.157076	33.10650	13793.17	23.26774
#2	134.5351	-2.11743	3.279462	3.962599	30.57816	12815.31	24.61838
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	24.20401	4.387960	14.14959	-17.5256	72.97395	644.8184
#1	25.14272	4.171111	17.22640	-14.5520	75.30968	726.4982
#2	23.26529	4.604810	11.07279	-20.4993	70.63823	563.1386
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-029-029-1/1 Operator: LCM
Run Time: 10/15/07 21:23:21
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	43690.24	-2.35196	11.52426	28.00275	.4506215	.3468256	191.2956
#1	44119.95	-2.68982	10.04538	28.31480	.5002519	.3209324	189.9468
#2	43260.52	-2.01409	13.00314	27.69071	.4009912	.3727188	192.6444
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	387.3721	7.916748	87.94370	211376.0	21.20614	565.7757	578.8875
#1	391.1761	7.958071	88.91402	213341.3	21.68699	571.7957	584.0975
#2	383.5681	7.875425	86.97336	209410.6	20.72528	559.7557	573.6775
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	NI	K	SE	AG	NA	TL	V
Avge	76.39407	462.7236	11.29675	-.346760	226.8145	1.878733	475.1313
#1	76.10322	471.5260	10.66093	-.201983	257.6085	5.126625	480.8471
#2	76.68492	453.9211	11.93257	-.491537	196.0205	-1.36916	469.4157
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	114.2197	-2.09135	2.758616	3.985044	21.29433	9485.305	21.44822
#1	114.4517	-2.35201	3.052410	4.358098	21.59278	9613.528	22.99763
#2	113.9877	-1.83069	2.464822	3.611990	20.99589	9357.081	19.89880
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	21.08468	9.508126	12.19059	-15.2940	104.2733	612.0558
#1	21.03131	10.50234	10.73975	-20.9303	111.7716	626.6074
#2	21.13804	8.513916	13.64142	-9.65778	96.77508	597.5041
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-030-030-1/1 Operator: LCM
Run Time: 10/15/07 21:32:57
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	32948.66	1.308186	6.185495	39.08749	.6095529	1.486642	672.0856
#1	32930.82	2.248475	5.749004	39.09981	.7245195	1.263493	668.4960
#2	32966.51	.3678980	6.621986	39.07517	.4945864	1.709791	675.6751
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	363.1810	19.45815	114.1445	268679.1	54.98920	1757.680	625.4653
#1	362.0639	19.11928	114.0424	267969.7	54.38742	1751.121	623.6888
#2	364.2980	19.79702	114.2467	269388.4	55.59098	1764.240	627.2419
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	NI	K	SE	AG	NA	TL	V
Avge	78.07295	446.6001	17.65188	.5703731	228.0199	-.788441	586.0936
#1	77.83789	446.7823	16.93950	.4602327	230.1483	2.279232	584.8556
#2	78.30800	446.4179	18.36426	.6805136	225.8915	-3.85611	587.3317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	154.8632	-2.84960	3.400116	5.720917	27.26301	14803.04	55.46429
#1	154.4273	-2.87900	2.658576	5.763700	27.23620	14775.39	54.25116
#2	155.2992	-2.82020	4.141655	5.678133	27.28981	14830.70	56.67742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	54.75126	12.51458	20.22013	-14.0512	90.01251	672.3220
#1	54.45507	8.850647	20.98352	-13.8434	99.62956	665.9667
#2	55.04744	16.17852	19.45673	-14.2591	80.39547	678.6774
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-031-031-1/1 Operator: LCM
Run Time: 10/15/07 21:42:13
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	42109.54	-1.88215	.6293985	44.05074	.7006921	1.258994	1563.478
#1	42452.73	-.900500	1.693249	44.49512	.6469966	1.082281	1575.344
#2	41766.34	-2.86380	-.434452	43.60636	.7543875	1.435707	1551.612
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	284.3004	16.48290	94.48690	193234.2	34.04700	2141.327	708.4644
#1	285.4789	16.38388	95.42312	194746.2	34.72712	2157.096	714.0999
#2	283.1219	16.58193	93.55068	191722.2	33.36688	2125.558	702.8289
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	NI	K	SE	AG	NA	TL	V
Avge	76.59547	592.7186	9.486808	.6415793	186.9224	1.220541	458.8332
#1	77.11124	596.0384	9.109269	.5575091	144.5276	1.484905	462.6368
#2	76.07970	589.3989	9.864346	.7256495	229.3173	.9561768	455.0296
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	149.8554	-2.74894	1.860889	4.963034	41.83777	12736.63	32.28239
#1	150.0658	-3.54304	1.380929	3.097735	42.24675	12849.02	31.36832
#2	149.6450	-1.95484	2.340850	6.828333	41.42878	12624.24	33.19647
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	34.92894	3.514468	12.47265	-12.2367	123.7560	645.8384
#1	36.40620	-3.51103	15.41908	-17.1333	151.1004	656.5998
#2	33.45168	10.53996	9.526215	-7.34013	96.41158	635.0770
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-032-032-1/1 Operator: LCM
Run Time: 10/15/07 21:51:29
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	82151.64	-1.66950	3.652636	27.86735	.5559211	1.407289	1071.566
#1	82169.71	-2.56664	2.959406	27.81981	.5521976	1.312294	1071.269
#2	82133.56	-.772361	4.345866	27.91490	.5596446	1.502283	1071.863
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	201.9545	16.13110	115.0745	156058.7	36.52419	2874.188	635.5114
#1	202.5905	15.87969	115.6164	156313.8	35.75144	2881.263	636.6857
#2	201.3185	16.38250	114.5326	155803.6	37.29693	2867.112	634.3371
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	NI	K	SE	AG	NA	TL	V
Avge	106.4060	510.9731	12.53529	.1013529	262.9609	-.263172	353.6163
#1	106.1938	514.7793	12.82531	.0922437	331.9266	3.066479	354.1483
#2	106.6182	507.1670	12.24528	.1104621	193.9952	-3.59282	353.0843
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	193.6138	-.277703	2.512017	3.330316	25.93640	11205.15	33.89650
#1	194.1892	-.334234	2.823797	2.583062	26.02206	11242.84	32.35037
#2	193.0384	-.221171	2.200238	4.077569	25.85075	11167.46	35.44264
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	37.83771	15.14077	11.23216	-12.6926	108.2342	735.2249
#1	37.45165	17.82993	10.32260	-12.9372	117.4992	736.3091
#2	38.22376	12.45162	12.14171	-12.4479	98.96911	734.1407
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-033-033-1/1 Operator: LCM
Run Time: 10/15/07 22:00:44
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	47829.78	.1197705	7.686735	39.67783	.7886252	3.077728	967.6458
#1	47855.36	-.568525	7.360437	39.77878	.7515578	3.217890	967.2420
#2	47804.19	.8080664	8.013032	39.57687	.8256927	2.937567	968.0496
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	321.6337	19.44542	142.0740	256810.4	62.91947	2159.571	682.3102
#1	321.5827	19.37983	142.4651	256835.6	62.52266	2162.844	682.5961
#2	321.6848	19.51101	141.6829	256785.2	63.31628	2156.298	682.0242
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	NI	K	SE	AG	NA	TL	V
Avge	100.4483	561.2840	17.29076	.2579074	272.5931	1.049183	594.1936
#1	100.1206	558.6452	18.41754	.5622529	212.6030	1.488560	594.6198
#2	100.7760	563.9228	16.16398	-.046438	332.5832	.6098061	593.7674
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	220.0388	-3.39205	4.359540	5.817474	36.74709	15793.14	63.34995
#1	220.2340	-2.94991	4.037421	4.786156	36.80969	15825.08	63.82562
#2	219.8436	-3.83418	4.681660	6.848793	36.68448	15761.19	62.87429
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	62.70383	14.56245	18.65443	-10.7829	103.4132	694.4310
#1	61.87077	20.50188	17.37489	-12.9834	105.7468	694.8166
#2	63.53688	8.623011	19.93398	-8.58243	101.0796	694.0454
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-034-034-1/1 Operator: LCM
Run Time: 10/15/07 22:10:20
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	36059.16	-3.00688	7.420141	31.29626	.5366034	1.097857	478.0560
#1	36070.52	-2.54821	7.029445	31.31643	.5129976	1.000587	479.7215
#2	36047.81	-3.46555	7.810838	31.27610	.5602092	1.195126	476.3905
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	345.4799	15.45885	91.31764	246071.8	30.66926	1276.356	529.1412
#1	346.8722	15.64149	92.33577	246655.0	30.19984	1277.974	530.7752
#2	344.0876	15.27621	90.29951	245488.7	31.13868	1274.738	527.5072
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	NI	K	SE	AG	NA	TL	V
Avge	69.02181	354.0869	14.99905	-.096042	107.9705	.8227158	498.2176
#1	68.36787	353.1017	14.30330	.4491071	116.7012	.8604011	499.6076
#2	69.67575	355.0720	15.69480	-.641191	99.23978	.7850304	496.8277
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	117.0956	-2.13758	2.819098	1.923457	22.99468	12641.83	30.42897
#1	117.8605	-2.11281	2.898861	2.134447	23.05753	12677.41	30.41555
#2	116.3306	-2.16234	2.739336	1.712467	22.93182	12606.26	30.44239
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	30.78900	12.41481	16.29073	-14.3797	88.90576	740.3876
#1	30.09165	13.30078	14.80415	-16.9715	90.40556	747.0462
#2	31.48635	11.52884	17.77730	-11.7879	87.40597	733.7289
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-035-035-1/1 Operator: LCM
Run Time: 10/15/07 22:19:36
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	39728.47	-1.20413	3.138579	50.51884	.7573467	5.322702	1664.957
#1	39736.62	-.853914	3.097170	50.46040	.7515551	5.156977	1666.391
#2	39720.32	-1.55435	3.179987	50.57727	.7631383	5.488428	1663.523
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	298.9836	22.48996	210.0731	208701.9	44.98325	2360.827	936.4639
#1	298.8412	22.43233	209.6100	208761.4	45.89954	2356.266	937.1916
#2	299.1261	22.54759	210.5363	208642.4	44.06696	2365.388	935.7361
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	NI	K	SE	AG	NA	TL	V
Avge	81.68541	489.0376	14.01911	18.26893	302.0598	1.228424	530.8037
#1	81.43542	491.8304	13.54231	18.47480	311.6655	3.327187	530.4697
#2	81.93540	486.2448	14.49592	18.06307	292.4540	-.870338	531.1378
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	187.0771	-2.28961	3.343642	5.415796	46.18049	15074.77	44.95947
#1	187.9879	-2.59306	3.371998	5.590498	46.13537	15067.85	45.68177
#2	186.1663	-1.98616	3.315286	5.241095	46.22561	15081.68	44.23717
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	44.99480	10.91960	15.56850	-11.5419	117.7407	701.1425
#1	46.00811	10.93880	14.84370	-6.31842	108.8980	701.5413
#2	43.98148	10.90041	16.29331	-16.7654	126.5833	700.7436
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: CVCCV4 Operator: LCM
Run Time: 10/15/07 22:31:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	52524.18	530.4583	528.4252	520.3261	51.59357	510.3561	102450.4
#1	52526.46	530.7361	523.6103	521.3928	51.73819	510.8780	102646.4
#2	52521.90	530.1805	533.2402	519.2595	51.44894	509.8343	102254.4
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	512.2636	512.6019	522.3840	50460.37	514.9724	103070.1	514.8946
#1	513.3079	513.9824	520.7390	50606.97	516.4711	103225.1	516.3008
#2	511.2193	511.2215	524.0291	50313.77	513.4737	102915.1	513.4884
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	NI	K	SE	AG	NA	TL	V
Avge	512.6201	Q79169.74	537.6913	534.0772	101851.6	522.3745	520.4531
#1	513.1347	Q79169.86	536.9368	533.5544	101756.7	521.1138	521.4350
#2	512.1055	Q79169.62	538.4458	534.6000	101946.4	523.6351	519.4712
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	508.3879	526.8462	524.4602	524.4125	518.7839	515.8574	507.6708
#1	508.4391	527.8656	524.3725	528.8608	519.6359	515.8111	506.6526
#2	508.3367	525.8267	524.5479	519.9642	517.9320	515.9036	508.6890
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	TE	ZR	SI
Avge	518.6229	544.0726	534.5002	530.3769	473.4087	546.4851
#1	521.3800	542.8051	534.0023	529.7292	465.3913	545.2398
#2	515.8658	545.3403	534.9982	531.0248	481.4262	547.7305
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB4 Operator: LCM
Run Time: 10/15/07 22:41:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	16.28248	-2.57291	-4.39669	.1706092	-.146653	.2527344	11.95975
#1	21.25776	-2.30488	-4.73616	.2080845	-.210852	.3384875	25.06551
#2	11.30719	-2.84095	-4.05723	.1331340	-.082454	.1669813	-1.14601
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.063633	-.611390	.6800795	25.85647	.1322153	34.36769	.1616511
#1	.0861537	-.670877	.6840221	35.66868	.6570989	45.23674	.2590992
#2	-.213420	-.551904	.6761368	16.04426	-.392668	23.49865	.0642029
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	NI	K	SE	AG	NA	TL	V
Avge	.7848582	29.75789	3.703333	-.480474	-48.2543	1.772141	.5187991
#1	.3983447	34.13966	2.936882	-.507001	-132.870	2.154793	.3143464
#2	1.171372	25.37611	4.469783	-.453946	36.36126	1.389489	.7232518
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0675370	-.275979	.4324330	-.193608	.1452476	.4935139	1.490918
#1	-.270331	.8030877	.9162889	-.648472	.1962639	.5891702	1.720863
#2	.4054052	-1.35505	-.051423	.2612570	.0942314	.3978576	1.260973
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-.547616	8.038831	1.535246	2.832640	-48.2726	2.937683
#1	.1247368	7.105815	.8520585	3.216160	-42.8800	2.732986
#2	-1.21997	8.971847	2.218435	2.449121	-53.6652	3.142379
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000

Method: TRACE1 Sample Name: S 710030-036-036-1/1 Operator: LCM
Run Time: 10/15/07 22:50:33
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	98707.45	-4.55930	2.151620	18.77485	.3277685	1.074852	492.5983
#1	100482.9	-4.17509	1.200347	19.10435	.3461789	1.222029	501.2288
#2	96932.04	-4.94350	3.102894	18.44536	.3093581	.9276743	483.9678
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	115.8981	12.94102	63.07811	92290.67	14.09067	2686.302	430.1642
#1	118.4583	12.88228	65.17152	94240.56	15.74794	2746.494	439.2954
#2	113.3378	12.99977	60.98470	90340.77	12.43340	2626.109	421.0331
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	NI	K	SE	AG	NA	TL	V
Avge	88.21863	373.8262	9.603507	-.604634	61.32762	-1.62048	215.9769
#1	90.26232	377.5487	10.25550	-.136895	-4.25752	1.676926	221.6856
#2	86.17493	370.1038	8.951518	-1.07237	126.9128	-4.91788	210.2681
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	88.15418	.6149980	1.409213	-.808434	15.51569	7857.119	6.882263
#1	89.31464	.5255110	1.431021	.3985825	15.81569	8064.821	5.792084
#2	86.99373	.7044849	1.387406	-2.01545	15.21569	7649.418	7.972443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	17.69453	7.819970	10.49496	-7.97003	-12.0971	611.6987
#1	20.72554	2.777057	13.99439	-11.9172	-13.3646	626.5767
#2	14.66353	12.86288	6.995527	-4.02289	-10.8295	596.8207
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: S 710030-037-037-1/1 Operator: LCM
Run Time: 10/15/07 23:00:02
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	44968.92	.0918698	5.566517	35.19814	.6615357	2.839459	704.2221
#1	44897.06	-1.23481	6.383484	35.21314	.6645572	2.803780	703.6150
#2	45040.79	1.418554	4.749551	35.18314	.6585141	2.875139	704.8292
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	-6.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	296.4523	17.00624	107.0413	237069.5	42.81380	1732.585	580.6964
#1	296.8655	16.96774	107.0424	237255.6	43.49493	1736.758	581.1327
#2	296.0391	17.04474	107.0403	236883.3	42.13267	1728.413	580.2600
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	NI	K	SE	AG	NA	TL	V
Avge	93.36272	501.6997	14.18985	.3420153	336.3660	-.033735	540.4476
#1	92.08624	506.2013	11.62664	.4537176	413.2895	-1.06785	541.4600
#2	94.63919	497.1980	16.75307	.2303130	259.4425	1.000382	539.4354
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	52500.00	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-5.00000	-5.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	170.4267	-2.06435	3.974191	8.219974	30.18565	14265.17	41.55174
#1	170.2745	-2.54143	3.688314	9.039185	30.21170	14283.02	42.84402
#2	170.5788	-1.58727	4.260067	7.400763	30.15960	14247.33	40.25946
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	5250.000	10500.00	10500.00	2100.000	105000.0	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	43.44446	11.06324	15.75281	-9.88710	77.89813	716.0945
#1	43.81997	9.677064	12.60106	-9.91795	80.61490	715.7274
#2	43.06895	12.44942	18.90456	-9.85625	75.18137	716.4617
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass
High						52500.00
Low						-50.0000

Method: TRACE1 Sample Name: CVCCV4 Operator: LCM
Run Time: 10/16/07 00:30:14
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	52580.90	527.2914	526.6615	515.9044	51.41553	509.3983	102291.8
#1	52607.52	524.9983	524.7871	516.2225	51.66799	509.5473	102317.9
#2	52554.28	529.5843	528.5360	515.5864	51.16305	509.2494	102265.6
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
Avge	512.7893	510.7562	522.6940	50334.43	513.0930	103410.8	513.3697
#1	513.0223	510.1242	523.0947	50315.73	514.0928	103401.8	512.9670
#2	512.5563	511.3882	522.2932	50353.12	512.0931	103419.7	513.7723
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	NI	K	SE	AG	NA	TL	V
Avge	514.1993	Q78751.80	528.7148	532.2295	102495.1	523.6519	519.0934
#1	513.6005	Q78895.64	526.8807	531.3776	102786.1	522.9301	519.3686
#2	514.7982	Q78607.95	530.5488	533.0814	102204.1	524.3735	518.8182
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	500.0000	500.0000	100000.0	500.0000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	503.7320	529.5634	521.9916	519.8760	518.0768	514.9026	507.3838
#1	503.7115	530.6904	519.2781	519.6921	518.2957	515.9561	506.8293
#2	503.7525	528.4363	524.7050	520.0598	517.8580	513.8491	507.9383
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	TE	ZR	SI
Avge	515.9473	535.1312	525.5062	523.1346	Q445.2961	547.6296
#1	517.7243	534.6971	522.9722	525.0050	Q438.3849	548.2204
#2	514.1702	535.5652	528.0403	521.2642	452.2074	547.0389
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value				500.0000	500.0000	500.0000
Range				10.00000	10.00000	10.00000

Method: TRACE1 Sample Name: BCCCB4 Operator: LCM
Run Time: 10/16/07 00:39:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	16.18248	-1.03512	-5.12266	.1848878	-.025912	.1716923	-3.40483
#1	20.07792	-2.98226	-5.15451	.2417725	-.164216	.1522609	7.393510
#2	12.28704	.9120064	-5.09081	.1280032	.1123915	.1911238	-14.2032
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	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.155395	-.366360	.6191711	14.30788	-.900077	33.12329	.2776703
#1	-.663106	-.545173	.8236584	18.72220	-.884879	46.47716	.3825380
#2	.3523163	-.187546	.4146838	9.893560	-.915275	19.76941	.1728027
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	NI	K	SE	AG	NA	TL	V
Avge	1.595277	31.55711	2.602511	-.572836	-38.3363	3.002877	.7182176
#1	1.974378	30.79322	3.207218	-.326640	-215.268	3.490301	-.026222
#2	1.216176	32.32100	1.997804	-.819031	138.5951	2.515452	1.462657
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	5.000000	2500.000	30.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.1330182	.2246218	.8382809	-1.13274	.1373067	.3397225	.8358185
#1	.3527948	-.503338	.9153106	-.652317	.1895779	.2317228	.3098735
#2	-.086758	.9525821	.7612512	-1.61316	.0850354	.4477221	1.361764
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	TE	ZR	SI
Avge	-1.76850	5.526378	1.140245	2.367755	-36.1179	1.540347
#1	-1.48273	5.810901	1.905025	-2.27064	-53.2602	1.874891
#2	-2.05427	5.241854	.3754656	7.006152	-18.9756	1.205802
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value						.0000000
Range						50.00000