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

December 20, 2007

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

Dear Mr. Miller:

Enclosed is a Sample Data Package for the Schofield Barracks soil samples that SC&A subcontracted to General Engineering Laboratories in Charleston, South Carolina, for gamma spectroscopy, and to GPL Laboratories, in Frederick, Maryland, for the elemental lead analysis. SC&A has combined their reports and included them in this Sample Data Package.

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

Sincerely,

Cynthia White

Cynthia White
Laboratory Director

cc: Tony Mason, Cabrera Services

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

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Case Narrative
for
Sanford Cohen and Associates, Inc.
SDG: 198701

December 10, 2007

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample Receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on December 04, 2007 for analysis. All sample containers arrived without any visible signs of tampering or breakage. Shipping container temperature was within specification. There are no additional comments concerning sample receipt.

Sample Identification

The laboratory received the following samples:

Laboratory ID	Client ID
198701001	SB-CZ-SS-2322-ST
198701002	SB-CZ-SS-2323-ST
198701003	SB-CZ-SS-2324-ST
198701004	SB-CZ-SS-2325-ST
198701005	SB-CZ-SS-2326-ST
198701006	SB-CZ-SS-2327-ST
198701007	SB-CZ-SS-2328-ST
198701008	SB-CZ-SS-2329-ST
198701009	SB-CZ-SS-2330-ST
198701010	SB-CZ-SS-2331-ST
198701011	SB-CZ-SS-2332-ST
198701012	SB-CZ-SS-2333-ST
198701013	SB-CZ-SS-2334-ST
198701014	SB-CZ-SS-2335-ST
198701015	SB-CZ-SS-2322-SD
198701016	SB-CZ-SS-2323-SD
198701017	SB-CZ-SS-2324-SD
198701018	SB-CZ-SS-2325-SD
198701019	SB-CZ-SS-2326-SD
198701020	SB-CZ-SS-2327-SD
198701021	SB-CZ-SS-2328-SD
198701022	SB-CZ-SS-2329-SD
198701023	SB-CZ-SS-2330-SD
198701024	SB-CZ-SS-2331-SD
198701025	SB-CZ-SS-2332-SD
198701026	SB-CZ-SS-2333-SD
198701027	SB-CZ-SS-2334-SD
198701028	SB-CZ-SS-2335-SD
198701029	SB-CZ-SS-2336-ST

198701030	SB-CZ-SS-2337-ST
198701031	SB-CZ-SS-2338-ST
198701032	SB-CZ-SS-2339-ST
198701033	SB-CZ-SS-2340-ST
198701034	SB-CZ-SS-2341-ST
198701035	SB-CZ-SS-2342-ST
198701036	SB-CZ-SS-2343-ST
198701037	SB-CZ-SS-2344-ST
198701038	SB-CZ-SS-2345-ST
198701039	SB-CZ-SS-2346-ST
198701040	SB-CZ-SS-2347-ST
198701041	SB-CZ-SS-2348-ST
198701042	SB-CZ-SS-2349-ST
198701043	SB-CZ-SS-2336-SD
198701044	SB-CZ-SS-2337-SD
198701045	SB-CZ-SS-2338-SD
198701046	SB-CZ-SS-2339-SD
198701047	SB-CZ-SS-2340-SD
198701048	SB-CZ-SS-2341-SD
198701049	SB-CZ-SS-2342-SD
198701050	SB-CZ-SS-2343-SD
198701051	SB-CZ-SS-2344-SD
198701052	SB-CZ-SS-2345-SD
198701053	SB-CZ-SS-2346-SD
198701054	SB-CZ-SS-2347-SD
198701055	SB-CZ-SS-2348-SD
198701056	SB-CZ-SS-2349-SD

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, and data from the following fractions: Radiochemistry.

Amanda Rasco

Project Manager

Chain of Custody and Supporting Documentation

198701

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

WORK ASIGNMENT # 07-3080.04

PROJECT NAME: Schofield CZ

Client Name: JMC

Project Manager: Greg Miller

Requested Comp. Date

Notify Upon Receipt?

COC# 23 34

ANALYSIS REQUESTED

FOR LABORATORY USE

Laboratory Prefix

Study I.D.

Pg_____ of

Item No.	Date	Time	Matrix	Sample I.D.	# of CONTAINERS		Gamma Spec & Lead							Laboratory	Comments
1	9/28/2007		Soil	SB-CZ-SS-2322-ST	1		X						01		
2	9/28/2007		Soil	SB-CZ-SS-2323-ST	1		X						02		
3	9/28/2007		Soil	SB-CZ-SS-2324-ST	1		X						03		
4	9/28/2007		Soil	SB-CZ-SS-2325-ST	1		X						04		
5	9/28/2007		Soil	SB-CZ-SS-2326-ST	1		X						05		
6	9/28/2007		Soil	SB-CZ-SS-2327-ST	1		X						06		
7	9/28/2007		Soil	SB-CZ-SS-2328-ST	1		X						07		
8	9/28/2007		Soil	SB-CZ-SS-2329-ST	1		X						08		
9	9/28/2007		Soil	SB-CZ-SS-2330-ST	1		X						09		
10	9/28/2007		Soil	SB-CZ-SS-2331-ST	1		X						10		
11	9/28/2007		Soil	SB-CZ-SS-2332-ST	1		X						11		
12	9/28/2007		Soil	SB-CZ-SS-2333-ST	1		X						12		
13	9/28/2007		Soil	SB-CZ-SS-2334-ST	1		X						13		
14	9/28/2007		Soil	SB-CZ-SS-2335-ST	1		X						14		

Sampled by and Title Alfred Craig FSP — Date/Time 9-28-07 — Relinquished by: Alfred Craig FSP — Date/Time

Received by: Tiffany Adams — Date/Time 12-04-07 950 — Relinquished by: — Date/Time

Received by: C. Owen - SC&A — Date/Time 12/4/07 9:45 — Relinquished by: C. Owen - SC&A — Date/Time 12/4/07 15:00

Remarks: Chain of Custody number was changed per: [illegible]

Sample shipped via

UPS FED-EX HAND OTHER

Air Bill #

QC Level 1 2 3

COC | ICE

ANA REQ | TEMP

Cust Seal | pH

Sample

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

WORK ASIGNMENT # 07-3080.04

PROJECT NAME: Schofield CZ

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Notify Upon Receipt?

COC# 34

ANALYSIS REQUESTED

FOR LABORATORY USE

Laboratory Prefix

Study I.D.

Pg_____ of

Item No.	Date	Time	Matrix	Sample I.D.	# of CONTAINERS		Gamma Spec & Lead							Laboratory	Comments
												04207	7961		
1	9/28/2007		Soil	SB-CZ-SS-2322-SD	1		X						01		
2	9/28/2007		Soil	SB-CZ-SS-2323-SD	1		X						02		
3	9/28/2007		Soil	SB-CZ-SS-2324-SD	1		X						03		
4	9/28/2007		Soil	SB-CZ-SS-2325-SD	1		X						04		
5	9/28/2007		Soil	SB-CZ-SS-2326-SD	1		X						05		
6	9/28/2007		Soil	SB-CZ-SS-2327-SD	1		X						06		
7	9/28/2007		Soil	SB-CZ-SS-2328-SD	1		X						07		
8	9/28/2007		Soil	SB-CZ-SS-2329-SD	1		X						08		
9	9/28/2007		Soil	SB-CZ-SS-2330-SD	1		X						09		
10	9/28/2007		Soil	SB-CZ-SS-2331-SD	1		X						10		
11	9/28/2007		Soil	SB-CZ-SS-2332-SD	1		X						11		
12	9/28/2007		Soil	SB-CZ-SS-2333-SD	1		X						12		
13	9/28/2007		Soil	SB-CZ-SS-2334-SD	1		X						13		
14	9/28/2007		Soil	SB-CZ-SS-2335-SD	1		X						14		

Sampled by and Title Alfred Craig FSP — Date/Time 9-28-07

Received by: [illegible] — Date/Time 12-11-07 950

Received by: C. Owens - SC&A — Date/Time 10/2/07 845

Remarks:

Relinquished by: Alfred Craig FSP — Date/Time

Relinquished by: — Date/Time

Relinquished by: C. Owens - SC&A — Date/Time 10/3/07 15:00

Sample shipped via

UPS FED-EX HAND OTHER

Air Bill #

QC Level 1 2 3

COC | ICE

ANA REQ | TEMP

Cust Seal | pH

Sample

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

WORK ASIGNMENT # 07-3080.04

PROJECT NAME: Schofield CZ

Client Name: JMC

Project Manager: Greg Miller

Requested Comp. Date

Notify Upon Receipt?

COC# 34

ANALYSIS REQUESTED

FOR LABORATORY USE

Laboratory Prefix

Study I.D.

Pg_____ of

Item No.	Date	Time	Matrix	Sample I.D.	# of CONTAINERS		Gamma Spec & Lead							Laboratory	Comments
												04201	7962		
1	9/28/2007		Soil	SB-CZ-SS-2336-ST	1		X						01		
2	9/28/2007		Soil	SB-CZ-SS-2337-ST	1		X						02		
3	9/28/2007		Soil	SB-CZ-SS-2338-ST	1		X						03		
4	9/28/2007		Soil	SB-CZ-SS-2339-ST	1		X						04		
5	9/28/2007		Soil	SB-CZ-SS-2340-ST	1		X						05		
6	9/28/2007		Soil	SB-CZ-SS-2341-ST	1		X						06		
7	9/28/2007		Soil	SB-CZ-SS-2342-ST	1		X						07		
8	9/28/2007		Soil	SB-CZ-SS-2343-ST	1		X						08		
9	9/28/2007		Soil	SB-CZ-SS-2344-ST	1		X						09		
10	9/28/2007		Soil	SB-CZ-SS-2345-ST	1		X						10		
11	9/28/2007		Soil	SB-CZ-SS-2346-ST	1		X						11		
12	9/28/2007		Soil	SB-CZ-SS-2347-ST	1		X						12		
13	9/28/2007		Soil	SB-CZ-SS-2348-ST	1		X						13		
14	9/28/2007		Soil	SB-CZ-SS-2349-ST	1		X						14		

Sampled by and Title Alfred Craig FSP — Date/Time 9-28-07 — Relinquished by: Alfred Craig FSP — Date/Time

Received by: [illegible] — Date/Time 9-04-07 950 — Relinquished by: — Date/Time

Received by: C. Owens SC&A — Date/Time 10/2/07 8:45 — Relinquished by: C. Owens SC&A — Date/Time 10/3/07 15:00

Remarks:

Sample shipped via

UPS FED-EX HAND OTHER

Air Bill #

QC Level 1 2 3

COC | ICE

ANA REQ | TEMP

Cust Seal | pH

Sample

SC & A
CHAIN OF CUSTODY RECORD

1000 MONTICELLO COURT
MONTGOMERY, AL 36117

(334) 272-2234 (334)213-0407 FAX

WORK ASIGNMENT # 07-3080.04

PROJECT NAME: Schofield CZ

Client Name: JMC

Project Manager: Greg Miller

Requested Comp. Date

Notify Upon Receipt?

COC# 34

ANALYSIS REQUESTED

FOR LABORATORY USE

Laboratory Prefix

Study I.D.

Pg_____ of

Item No.	Date	Time	Matrix	Sample I.D.	# of CONTAINERS		Gamma Spec & Lead							Laboratory	Comments
												01H201	7963		
1	9/28/2007		Soil	SB-CZ-SS-2336-SD	1		X						01		
2	9/28/2007		Soil	SB-CZ-SS-2337-SD	1		X						02		
3	9/28/2007		Soil	SB-CZ-SS-2338-SD	1		X						03		
4	9/28/2007		Soil	SB-CZ-SS-2339-SD	1		X						04		
5	9/28/2007		Soil	SB-CZ-SS-2340-SD	1		X						05		
6	9/28/2007		Soil	SB-CZ-SS-2341-SD	1		X						06		
7	9/28/2007		Soil	SB-CZ-SS-2342-SD	1		X						07		
8	9/28/2007		Soil	SB-CZ-SS-2343-SD	1		X						08		
9	9/28/2007		Soil	SB-CZ-SS-2344-SD	1		X						09		
10	9/28/2007		Soil	SB-CZ-SS-2345-SD	1		X						10		
11	9/28/2007		Soil	SB-CZ-SS-2346-SD	1		X						11		
12	9/28/2007		Soil	SB-CZ-SS-2347-SD	1		X						12		
13	9/28/2007		Soil	SB-CZ-SS-2348-SD	1		X						13		
14	9/28/2007		Soil	SB-CZ-SS-2349-SD	1		X						14		

Sampled by and Title Alfred Craig FSP — Date/Time 9-28-07

Received by: [signature] — Date/Time 12-04-07 950

Received by: [signature] — Date/Time 10/3/07 8:45

Relinquished by: Alfred Craig FSP — Date/Time

Relinquished by: — Date/Time

Relinquished by [signature] — Date/Time 10/3/07 1500

Sample shipped via

UPS FED-EX HAND OTHER

Air Bill #

Remarks:

QC Level 1 2 3

COC | ICE

ANA REQ | TEMP

Cust Seal | pH

Sample

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCAN	**SDG/ARCOC/Work Order:** 198701
Received By: SRA	**Date Received:** 12-04-07 0900

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
Marked as radioactive?		✓	Maximum Counts Observed*: 80 CPM
Classified Radioactive II by RSO?		✓	
Marked containing PCBs?		✓	
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
Identified as Foreign Soil?		✓	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)?		✓		Preservation Method: ice bags blue ice dry ice none other (describe) 17
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present?			✓	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?			✓	Sample ID's and containers affected: OH207-7960, OH207-7961, OH207-7962, OH207-7963
10	Date & time on COC match date & time on bottles?			✓	Sample ID's affected: No Date or Time on sample containers
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Fed EX 841690697820

PM (or PMA) review: Initials RAA Date 12/4/07

SAMPLE RECEIPT & REVIEW FORM
CONTINUATION FORM

GEL LABORATORIES LLC

Client: SCAN Date Received: 12-04-07 9:50 Page ____ of ____

OH207-7960-01 - OH207-7960-14
OH207-7961-01 - OH 207-7961-14
OH207-7962-01 - OH 207-7962-14
OH207-7963-01 - OH207-7963-14

ID's on sample containers does not match the ID's on COC

List of current GEL Certifications as of 10 December 2007

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas NELAP	T104704235-07-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

RADIOLOGICAL ANALYSIS

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	708130
Prep Batch Number:	707920

Sample ID	Client ID
198701001	SB-CZ-SS-2322-ST
198701002	SB-CZ-SS-2323-ST
198701003	SB-CZ-SS-2324-ST
198701004	SB-CZ-SS-2325-ST
198701005	SB-CZ-SS-2326-ST
198701006	SB-CZ-SS-2327-ST
198701007	SB-CZ-SS-2328-ST
198701008	SB-CZ-SS-2329-ST
198701009	SB-CZ-SS-2330-ST
198701010	SB-CZ-SS-2331-ST
198701011	SB-CZ-SS-2332-ST
198701012	SB-CZ-SS-2333-ST
198701013	SB-CZ-SS-2334-ST
198701014	SB-CZ-SS-2335-ST
198701015	SB-CZ-SS-2322-SD
198701016	SB-CZ-SS-2323-SD
1201473840	Method Blank (MB)
1201473841	198689011(SB-CZ-SS-2146-BD) Sample Duplicate (DUP)
1201473842	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 198689011 (SB-CZ-SS-2146-BD).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high peak-width.	Europium-155	198701012
		Radium-223	198701007

UI	Data rejected due to interference.	Americium-243	198701001
			198701002
			198701003
			198701004
			198701005
			198701006
			198701007
			198701008
			198701009
			198701010
			198701011
			198701012
			198701013
			198701014
			198701015
			198701016
			1201473841
		Curium-243	198701011
		Europium-155	198701011
		Neptunium-236	198701014
		Neptunium-237	198701001
			198701002
			198701003
			198701004
			198701005
			198701007
			198701008
			198701009
			198701010
			198701012

			198701013
			198701014
			198701015
			198701016
			1201473841
		Radium-223	198701001
			198701002
			198701003
			198701004
			198701005
			198701006
			198701008
			198701009
			198701010
			198701011
			198701012
			198701013
			198701014
			198701015
			198701016
			1201473841
UI	Data rejected due to low abundance.	Bismuth-214	198701012
		Cobalt-60	1201473841
		Thorium-234	198701005
			1201473841
UI	Data rejected due to no valid peak.	Protactinium-234m	198701014

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	708131
Prep Batch Number:	707922

Sample ID	Client ID
198701017	SB-CZ-SS-2324-SD
198701018	SB-CZ-SS-2325-SD
198701019	SB-CZ-SS-2326-SD
198701020	SB-CZ-SS-2327-SD
198701021	SB-CZ-SS-2328-SD
198701022	SB-CZ-SS-2329-SD
198701023	SB-CZ-SS-2330-SD
198701024	SB-CZ-SS-2331-SD
198701025	SB-CZ-SS-2332-SD
198701026	SB-CZ-SS-2333-SD
198701027	SB-CZ-SS-2334-SD
198701028	SB-CZ-SS-2335-SD
198701029	SB-CZ-SS-2336-ST
198701030	SB-CZ-SS-2337-ST
198701031	SB-CZ-SS-2338-ST
198701032	SB-CZ-SS-2339-ST
198701033	SB-CZ-SS-2340-ST
198701034	SB-CZ-SS-2341-ST
198701035	SB-CZ-SS-2342-ST
198701036	SB-CZ-SS-2343-ST
1201473843	Method Blank (MB)
1201473844	198701017(SB-CZ-SS-2324-SD) Sample Duplicate (DUP)
1201473845	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 14.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 198701017 (SB-CZ-SS-2324-SD).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
The sample and duplicate, 1201473844 (SB-CZ-SS-2324-SD) and 198701017 (SB-CZ-SS-2324-SD), did not meet the relative percent difference requirement for Pb-214, however, it does meet the relative error ratio requirement with a value of 2.71.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high peak-width.	Neptunium-237	198701025
UI	Data rejected due to interference.	Americium-243	198701017
			198701018
			198701019
			198701020

	198701021
	198701022
	198701023
	198701024
	198701025
	198701026
	198701027
	198701028
	198701029
	198701030
	198701031
	198701032
	198701033
	198701034
	198701035
	198701036
	1201473844
Curium-243	198701018
	198701022
	198701024
Europium-155	198701018
	198701022
	198701024
Neptunium-236	198701019
	198701020
	198701021
	198701023
Neptunium-237	198701017
	198701018
	198701019

	198701020
	198701021
	198701022
	198701023
	198701024
	198701026
	198701027
	198701028
	198701029
	198701030
	198701031
	198701033
	198701034
	198701035
	198701036
	1201473844
Radium-223	198701017
	198701018
	198701019
	198701020
	198701021
	198701022
	198701023
	198701024
	198701025
	198701026
	198701027
	198701028
	198701029
	198701030

			198701031
			198701032
			198701033
			198701034
			198701035
			198701036
			1201473844
UI	Data rejected due to low abundance.	Americium-241	198701020
		Neptunium-236	198701027
UI	Data rejected due to no valid peak.	Bismuth-212	198701036
		Protactinium-234m	198701018
			198701022
		Uranium-235	198701034
			1201473844

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	708133
Prep Batch Number:	707923

Sample ID	Client ID
198701037	SB-CZ-SS-2344-ST
198701038	SB-CZ-SS-2345-ST
198701039	SB-CZ-SS-2346-ST
198701040	SB-CZ-SS-2347-ST
198701041	SB-CZ-SS-2348-ST
198701042	SB-CZ-SS-2349-ST
198701043	SB-CZ-SS-2336-SD
198701044	SB-CZ-SS-2337-SD
198701045	SB-CZ-SS-2338-SD
198701046	SB-CZ-SS-2339-SD
198701047	SB-CZ-SS-2340-SD
198701048	SB-CZ-SS-2341-SD
198701049	SB-CZ-SS-2342-SD
198701050	SB-CZ-SS-2343-SD
198701051	SB-CZ-SS-2344-SD
198701052	SB-CZ-SS-2345-SD
198701053	SB-CZ-SS-2346-SD
198701054	SB-CZ-SS-2347-SD
198701055	SB-CZ-SS-2348-SD
198701056	SB-CZ-SS-2349-SD
1201473846	Method Blank (MB)
1201473847	198701037(SB-CZ-SS-2344-ST) Sample Duplicate (DUP)
1201473848	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 14.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 198701037 (SB-CZ-SS-2344-ST).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to a high counting uncertainty.	Bismuth-212	198701038
		Cesium-137	198701051
		Protactinium-234m	198701053
UI	Data rejected due to high peak-width.	Americium-246	198701050
		Bismuth-212	198701055
		Californium-249	198701050
		Cesium-137	198701055
		Radium-223	198701042
UI	Data rejected due to interference.	Americium-243	198701037
			198701038
			198701039
			198701040

	198701041
	198701042
	198701043
	198701044
	198701045
	198701046
	198701047
	198701048
	198701049
	198701050
	198701051
	198701052
	198701053
	198701054
	198701055
	198701056
	1201473847
Curium-243	198701037
	198701047
Europium-155	198701037
	198701047
Lead-214	198701039
Neptunium-236	198701039
Neptunium-237	198701037
	198701038
	198701040
	198701041
	198701042
	198701043
	198701044

			198701045
			198701046
			198701047
			198701048
			198701049
			198701050
			198701051
			198701052
			198701053
			198701054
			198701055
			198701056
			1201473847
		Radium-223	198701037
			198701038
			198701039
			198701040
			198701041
			198701043
			198701045
			198701046
			198701047
			198701049
			198701050
			198701051
			198701054
UI	Data rejected due to low abundance.	Actinium-228	198701041
			198701056
		Bismuth-214	198701055
		Thallium-208	198701056

UI	Data rejected due to no valid peak.	Protactinium-234m	198701037
			198701040
			198701044
			198701054

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: Pamela Williams 12/18/07

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

SCAN001 Sanford Cohen and Associates, Inc.

Client SDG: 198701 GEL Work Order: 198701

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

ND The analyte concentration is not detected above the detection limit.

The above sample is reported on a dry weight basis except where prohibited by the analytical procedure.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Amanda Rasco.

Reviewed by

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID:	SB−CZ−SS−2322−ST	Project:	SCAN00101
Sample ID:	198701001	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.550	+/−0.199	0.164	+/−0.199	0.800	pCi/g		MJH1	12/12/07	1239	708130	1
Americium−241	U	0.0203	+/−0.0355	0.0542	+/−0.0355	0.200	pCi/g						
Americium−243	UI	0.122	+/−0.0303	0.0282	+/−0.0303		pCi/g						
Americium−246	U	−0.00581	+/−0.106	0.175	+/−0.106		pCi/g						
Antimony−125	U	−0.0199	+/−0.0692	0.113	+/−0.0692	0.200	pCi/g						
Bismuth−211	U	0.423	+/−0.944	1.45	+/−0.944		pCi/g						
Bismuth−212	U	0.295	+/−0.345	0.348	+/−0.345	0.500	pCi/g						
Bismuth−214		0.427	+/−0.124	0.092	+/−0.124	0.200	pCi/g						
Californium−249	U	0.0167	+/−0.0297	0.0513	+/−0.0297		pCi/g						
Cesium−137		0.225	+/−0.0699	0.0486	+/−0.0699	0.100	pCi/g						
Cobalt−60	U	0.027	+/−0.0343	0.0616	+/−0.0343	0.100	pCi/g						
Curium−243	U	0.0459	+/−0.0475	0.0815	+/−0.0475		pCi/g						
Europium−155	U	0.0351	+/−0.053	0.090	+/−0.053	0.500	pCi/g						
Lead−212		0.582	+/−0.0708	0.0585	+/−0.0708	0.100	pCi/g						
Lead−214		0.463	+/−0.100	0.0818	+/−0.100	0.100	pCi/g						
Neptunium−236	U	−0.00631	+/−0.0274	0.045	+/−0.0274		pCi/g						
Neptunium−237	UI	0.230	+/−0.0974	0.176	+/−0.0974		pCi/g						
Neptunium−239	U	−0.0838	+/−0.139	0.232	+/−0.139	2.00	pCi/g						
Polonium−209	U	2.20	+/−5.58	9.75	+/−5.58		pCi/g						
Potassium−40		3.38	+/−0.782	0.497	+/−0.782	1.00	pCi/g						
Protactinium−233	U	−0.0311	+/−0.0455	0.0717	+/−0.0455		pCi/g						
Protactinium−234m	U	0.331	+/−3.77	5.49	+/−3.77		pCi/g						
Radium−223	UI	0.338	+/−0.180	0.186	+/−0.180		pCi/g						
Rhodium−101	U	−0.0089	+/−0.022	0.0337	+/−0.022		pCi/g						
Thallium−208		0.187	+/−0.0544	0.0365	+/−0.0544	0.080	pCi/g						
Thorium−234		0.352	+/−0.237	0.307	+/−0.237	0.500	pCi/g						
Uranium−235	U	0.103	+/−0.115	0.196	+/−0.115	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2322−ST Project: SCAN00101
Sample ID: 198701001 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2323−ST
Sample ID: 198701002
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.831	+/−0.189	0.145	+/−0.189	0.800	pCi/g		MJH1	12/12/07	1239	708130	1
Americium−241	U	−0.0175	+/−0.109	0.142	+/−0.109	0.200	pCi/g						
Americium−243	UI	0.127	+/−0.0372	0.0452	+/−0.0372		pCi/g						
Americium−246	U	0.122	+/−0.0895	0.169	+/−0.0895		pCi/g						
Antimony−125	U	−0.0686	+/−0.0625	0.0974	+/−0.0625	0.200	pCi/g						
Bismuth−211	U	−0.202	+/−0.756	1.23	+/−0.756		pCi/g						
Bismuth−212		0.432	+/−0.283	0.305	+/−0.283	0.500	pCi/g						
Bismuth−214		0.598	+/−0.117	0.0778	+/−0.117	0.200	pCi/g						
Californium−249	U	−0.00801	+/−0.0261	0.0435	+/−0.0261		pCi/g						
Cesium−137		0.0914	+/−0.0408	0.0437	+/−0.0408	0.100	pCi/g						
Cobalt−60	U	0.00143	+/−0.0246	0.0416	+/−0.0246	0.100	pCi/g						
Curium−243	U	0.000348	+/−0.0505	0.0886	+/−0.0505		pCi/g						
Europium−155	U	0.0214	+/−0.0554	0.0986	+/−0.0554	0.500	pCi/g						
Lead−212		0.639	+/−0.0698	0.061	+/−0.0698	0.100	pCi/g						
Lead−214		0.686	+/−0.108	0.0718	+/−0.108	0.100	pCi/g						
Neptunium−236	U	−0.00105	+/−0.0309	0.0543	+/−0.0309		pCi/g						
Neptunium−237	UI	0.423	+/−0.167	0.190	+/−0.167		pCi/g						
Neptunium−239	U	0.023	+/−0.138	0.229	+/−0.138	2.00	pCi/g						
Polonium−209	U	0.745	+/−5.10	8.53	+/−5.10		pCi/g						
Potassium−40		5.87	+/−0.775	0.361	+/−0.775	1.00	pCi/g						
Protactinium−233	U	−0.00391	+/−0.0404	0.0694	+/−0.0404		pCi/g						
Protactinium−234m	U	−0.571	+/−3.33	4.93	+/−3.33		pCi/g						
Radium−223	UI	0.276	+/−0.191	0.177	+/−0.191		pCi/g						
Rhodium−101	U	−0.0118	+/−0.023	0.033	+/−0.023		pCi/g						
Thallium−208		0.223	+/−0.0475	0.0379	+/−0.0475	0.080	pCi/g						
Thorium−234		0.733	+/−0.408	0.406	+/−0.408	0.500	pCi/g						
Uranium−235	U	0.00275	+/−0.137	0.204	+/−0.137	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2323−ST Project: SCAN00101
Sample ID: 198701002 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2324−ST
Sample ID: 198701003
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.762	+/−0.202	0.145	+/−0.202	0.800	pCi/g		MJH1	12/13/07	0536	708130	1
Americium−241	U	0.00173	+/−0.0979	0.158	+/−0.0979	0.200	pCi/g						
Americium−243	UI	0.156	+/−0.040	0.0507	+/−0.040		pCi/g						
Americium−246	U	0.0784	+/−0.0841	0.155	+/−0.0841		pCi/g						
Antimony−125	U	0.0732	+/−0.056	0.102	+/−0.056	0.200	pCi/g						
Bismuth−211	U	−0.632	+/−0.660	1.01	+/−0.660		pCi/g						
Bismuth−212		0.408	+/−0.319	0.310	+/−0.319	0.500	pCi/g						
Bismuth−214		0.765	+/−0.115	0.0688	+/−0.115	0.200	pCi/g						
Californium−249	U	0.00537	+/−0.0257	0.0442	+/−0.0257		pCi/g						
Cesium−137		0.171	+/−0.0468	0.0413	+/−0.0468	0.100	pCi/g						
Cobalt−60	U	−0.0349	+/−0.0282	0.0408	+/−0.0282	0.100	pCi/g						
Curium−243	U	−0.00507	+/−0.055	0.0952	+/−0.055		pCi/g						
Europium−155	U	−0.0121	+/−0.0613	0.106	+/−0.0613	0.500	pCi/g						
Lead−212		0.931	+/−0.090	0.0597	+/−0.090	0.100	pCi/g						
Lead−214		0.939	+/−0.112	0.0679	+/−0.112	0.100	pCi/g						
Neptunium−236	U	−0.00865	+/−0.0365	0.0612	+/−0.0365		pCi/g						
Neptunium−237	UI	0.624	+/−0.187	0.205	+/−0.187		pCi/g						
Neptunium−239	U	−0.143	+/−0.135	0.228	+/−0.135	2.00	pCi/g						
Polonium−209	U	−1.42	+/−4.59	7.44	+/−4.59		pCi/g						
Potassium−40		7.35	+/−0.877	0.363	+/−0.877	1.00	pCi/g						
Protactinium−233	U	0.0422	+/−0.0407	0.0736	+/−0.0407		pCi/g						
Protactinium−234m	U	2.71	+/−3.84	4.59	+/−3.84		pCi/g						
Radium−223	UI	0.230	+/−0.207	0.193	+/−0.207		pCi/g						
Rhodium−101	U	0.031	+/−0.021	0.0393	+/−0.021		pCi/g						
Thallium−208		0.255	+/−0.0509	0.036	+/−0.0509	0.080	pCi/g						
Thorium−234		0.932	+/−0.399	0.443	+/−0.399	0.500	pCi/g						
Uranium−235	U	0.120	+/−0.147	0.212	+/−0.147	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2324−ST Project: SCAN00101
Sample ID: 198701003 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2325−ST
Sample ID: 198701004
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.69	+/−0.321	0.186	+/−0.321	0.800	pCi/g		MJH1	12/13/07	0536	708130	1
Americium−241	U	0.0413	+/−0.0241	0.0678	+/−0.0241	0.200	pCi/g						
Americium−243	UI	0.276	+/−0.0414	0.0413	+/−0.0414		pCi/g						
Americium−246	U	−0.0102	+/−0.133	0.217	+/−0.133		pCi/g						
Antimony−125	U	0.0722	+/−0.0835	0.146	+/−0.0835	0.200	pCi/g						
Bismuth−211	U	0.781	+/−1.29	1.98	+/−1.29		pCi/g						
Bismuth−212		0.827	+/−0.545	0.447	+/−0.545	0.500	pCi/g						
Bismuth−214		1.05	+/−0.164	0.103	+/−0.164	0.200	pCi/g						
Californium−249	U	−0.00978	+/−0.0339	0.0557	+/−0.0339		pCi/g						
Cesium−137		0.151	+/−0.0564	0.0567	+/−0.0564	0.100	pCi/g						
Cobalt−60	U	−0.0316	+/−0.0484	0.0615	+/−0.0484	0.100	pCi/g						
Curium−243	U	0.0762	+/−0.0973	0.102	+/−0.0973		pCi/g						
Europium−155	U	0.0847	+/−0.108	0.114	+/−0.108	0.500	pCi/g						
Lead−212		1.30	+/−0.137	0.0688	+/−0.137	0.100	pCi/g						
Lead−214		1.01	+/−0.152	0.0996	+/−0.152	0.100	pCi/g						
Neptunium−236	U	0.0363	+/−0.0456	0.0666	+/−0.0456		pCi/g						
Neptunium−237	UI	0.727	+/−0.192	0.202	+/−0.192		pCi/g						
Neptunium−239	U	0.113	+/−0.166	0.276	+/−0.166	2.00	pCi/g						
Polonium−209	U	−0.296	+/−6.84	11.4	+/−6.84		pCi/g						
Potassium−40		7.95	+/−1.02	0.531	+/−1.02	1.00	pCi/g						
Protactinium−233	U	−0.00587	+/−0.0508	0.0855	+/−0.0508		pCi/g						
Protactinium−234m	U	1.83	+/−6.86	6.95	+/−6.86		pCi/g						
Radium−223	UI	0.389	+/−0.298	0.227	+/−0.298		pCi/g						
Rhodium−101	U	0.0108	+/−0.0302	0.0465	+/−0.0302		pCi/g						
Thallium−208		0.432	+/−0.0788	0.0562	+/−0.0788	0.080	pCi/g						
Thorium−234		1.82	+/−0.534	0.470	+/−0.534	0.500	pCi/g						
Uranium−235	U	0.092	+/−0.214	0.246	+/−0.214	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2325−ST Project: SCAN00101
Sample ID: 198701004 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2326−ST
Sample ID: 198701005
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.745	+/−0.191	0.143	+/−0.191	0.800	pCi/g		MJH1	12/13/07	0537	708130	1
Americium−241	U	0.0318	+/−0.0905	0.153	+/−0.0905	0.200	pCi/g						
Americium−243	UI	0.179	+/−0.0411	0.0511	+/−0.0411		pCi/g						
Americium−246	U	0.0521	+/−0.0758	0.138	+/−0.0758		pCi/g						
Antimony−125	U	−0.0138	+/−0.0665	0.107	+/−0.0665	0.200	pCi/g						
Bismuth−211	U	0.00382	+/−0.847	1.22	+/−0.847		pCi/g						
Bismuth−212		0.487	+/−0.377	0.287	+/−0.377	0.500	pCi/g						
Bismuth−214		0.836	+/−0.114	0.0829	+/−0.114	0.200	pCi/g						
Californium−249	U	0.00845	+/−0.0287	0.044	+/−0.0287		pCi/g						
Cesium−137		0.194	+/−0.0424	0.0407	+/−0.0424	0.100	pCi/g						
Cobalt−60	U	0.0013	+/−0.027	0.0457	+/−0.027	0.100	pCi/g						
Curium−243	U	−0.014	+/−0.0492	0.0862	+/−0.0492		pCi/g						
Europium−155	U	0.0189	+/−0.0546	0.0978	+/−0.0546	0.500	pCi/g						
Lead−212		0.748	+/−0.0752	0.0579	+/−0.0752	0.100	pCi/g						
Lead−214		0.944	+/−0.110	0.0731	+/−0.110	0.100	pCi/g						
Neptunium−236	U	0.0293	+/−0.0349	0.0582	+/−0.0349		pCi/g						
Neptunium−237	UI	0.750	+/−0.258	0.182	+/−0.258		pCi/g						
Neptunium−239	U	0.193	+/−0.117	0.220	+/−0.117	2.00	pCi/g						
Polonium−209	U	−0.935	+/−5.32	8.69	+/−5.32		pCi/g						
Potassium−40		4.38	+/−0.756	0.344	+/−0.756	1.00	pCi/g						
Protactinium−233	U	−0.0238	+/−0.0392	0.0661	+/−0.0392		pCi/g						
Protactinium−234m	U	2.02	+/−4.86	4.74	+/−4.86		pCi/g						
Radium−223	UI	0.324	+/−0.168	0.176	+/−0.168		pCi/g						
Rhodium−101	U	0.0154	+/−0.0223	0.0344	+/−0.0223		pCi/g						
Thallium−208		0.178	+/−0.0462	0.0399	+/−0.0462	0.080	pCi/g						
Thorium−234	UI	0.992	+/−0.407	0.607	+/−0.407	0.500	pCi/g						
Uranium−235	U	−0.0684	+/−0.129	0.187	+/−0.129	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2326−ST Project: SCAN00101
Sample ID: 198701005 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2327−ST
Sample ID: 198701006
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date Time	Batch	Mtd
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid												
Actinium−228		0.848	+/−0.212	0.135	+/−0.212	0.800	pCi/g		MJH1	12/13/07 0538	708130	1
Americium−241	U	0.0277	+/−0.0933	0.150	+/−0.0933	0.200	pCi/g					
Americium−243	UI	0.138	+/−0.0462	0.0503	+/−0.0462		pCi/g					
Americium−246	U	0.0826	+/−0.0821	0.151	+/−0.0821		pCi/g					
Antimony−125	U	−0.0408	+/−0.0598	0.100	+/−0.0598	0.200	pCi/g					
Bismuth−211	U	−0.417	+/−0.652	1.05	+/−0.652		pCi/g					
Bismuth−212		0.737	+/−0.326	0.275	+/−0.326	0.500	pCi/g					
Bismuth−214		0.587	+/−0.111	0.0738	+/−0.111	0.200	pCi/g					
Californium−249	U	0.013	+/−0.0248	0.0427	+/−0.0248		pCi/g					
Cesium−137		0.0465	+/−0.0417	0.0397	+/−0.0417	0.100	pCi/g					
Cobalt−60	U	−0.0161	+/−0.0258	0.0414	+/−0.0258	0.100	pCi/g					
Curium−243	U	−0.0505	+/−0.0568	0.0959	+/−0.0568		pCi/g					
Europium−155	U	−0.0442	+/−0.0623	0.106	+/−0.0623	0.500	pCi/g					
Lead−212		0.891	+/−0.0903	0.0586	+/−0.0903	0.100	pCi/g					
Lead−214		0.766	+/−0.104	0.0704	+/−0.104	0.100	pCi/g					
Neptunium−236	U	−0.00531	+/−0.043	0.0618	+/−0.043		pCi/g					
Neptunium−237	U	0.129	+/−0.169	0.231	+/−0.169		pCi/g					
Neptunium−239	U	0.109	+/−0.139	0.248	+/−0.139	2.00	pCi/g					
Polonium−209	U	2.73	+/−4.98	8.69	+/−4.98		pCi/g					
Potassium−40		5.21	+/−0.730	0.357	+/−0.730	1.00	pCi/g					
Protactinium−233	U	0.00364	+/−0.0389	0.0665	+/−0.0389		pCi/g					
Protactinium−234m	U	2.93	+/−2.81	5.03	+/−2.81		pCi/g					
Radium−223	UI	0.218	+/−0.142	0.177	+/−0.142		pCi/g					
Rhodium−101	U	0.00969	+/−0.0293	0.0356	+/−0.0293		pCi/g					
Thallium−208		0.265	+/−0.0556	0.0384	+/−0.0556	0.080	pCi/g					
Thorium−234		0.646	+/−0.648	0.502	+/−0.648	0.500	pCi/g					
Uranium−235	U	0.023	+/−0.191	0.212	+/−0.191	0.500	pCi/g					

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2327−ST Project: SCAN00101
Sample ID: 198701006 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2328−ST
Sample ID: 198701007
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.15	+/−0.206	0.118	+/−0.206	0.800	pCi/g		MJH1	12/13/07	0655	708130	1
Americium−241	U	0.0407	+/−0.0742	0.113	+/−0.0742	0.200	pCi/g						
Americium−243	UI	0.217	+/−0.0423	0.043	+/−0.0423		pCi/g						
Americium−246	U	0.0491	+/−0.0734	0.129	+/−0.0734		pCi/g						
Antimony−125	U	0.0401	+/−0.0557	0.0959	+/−0.0557	0.200	pCi/g						
Bismuth−211	U	−0.38	+/−0.548	0.863	+/−0.548		pCi/g						
Bismuth−212		0.793	+/−0.287	0.245	+/−0.287	0.500	pCi/g						
Bismuth−214		0.891	+/−0.109	0.0637	+/−0.109	0.200	pCi/g						
Californium−249	U	0.0133	+/−0.0232	0.0397	+/−0.0232		pCi/g						
Cesium−137		0.293	+/−0.0474	0.0357	+/−0.0474	0.100	pCi/g						
Cobalt−60	U	0.0418	+/−0.0234	0.0445	+/−0.0234	0.100	pCi/g						
Curium−243	U	0.00599	+/−0.0499	0.0883	+/−0.0499		pCi/g						
Europium−155	U	0.00157	+/−0.0567	0.100	+/−0.0567	0.500	pCi/g						
Lead−212		1.01	+/−0.0885	0.0541	+/−0.0885	0.100	pCi/g						
Lead−214		0.916	+/−0.109	0.0664	+/−0.109	0.100	pCi/g						
Neptunium−236	U	0.0353	+/−0.0398	0.059	+/−0.0398		pCi/g						
Neptunium−237	UI	0.503	+/−0.146	0.196	+/−0.146		pCi/g						
Neptunium−239	U	0.00287	+/−0.129	0.221	+/−0.129	2.00	pCi/g						
Polonium−209	U	−0.79	+/−4.65	6.58	+/−4.65		pCi/g						
Potassium−40		6.78	+/−0.876	0.375	+/−0.876	1.00	pCi/g						
Protactinium−233	U	−0.0014	+/−0.0368	0.0618	+/−0.0368		pCi/g						
Protactinium−234m	U	−1.18	+/−2.60	3.91	+/−2.60		pCi/g						
Radium−223	UI	0.382	+/−0.281	0.187	+/−0.281		pCi/g						
Rhodium−101	U	−0.00181	+/−0.0213	0.0348	+/−0.0213		pCi/g						
Thallium−208		0.333	+/−0.0519	0.0284	+/−0.0519	0.080	pCi/g						
Thorium−234		1.11	+/−0.385	0.433	+/−0.385	0.500	pCi/g						
Uranium−235	U	0.0116	+/−0.153	0.187	+/−0.153	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2328−ST Project: SCAN00101
Sample ID: 198701007 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
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H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2329−ST
Sample ID: 198701008
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.852	+/−0.162	0.0957	+/−0.162	0.800	pCi/g		MJH1	12/13/07	0736	708130	1
Americium−241	U	0.0405	+/−0.0547	0.086	+/−0.0547	0.200	pCi/g						
Americium−243	UI	0.132	+/−0.0283	0.0355	+/−0.0283		pCi/g						
Americium−246	U	0.00805	+/−0.0633	0.108	+/−0.0633		pCi/g						
Antimony−125	U	0.00166	+/−0.0466	0.0803	+/−0.0466	0.200	pCi/g						
Bismuth−211	U	−0.0412	+/−0.462	0.788	+/−0.462		pCi/g						
Bismuth−212		0.577	+/−0.278	0.233	+/−0.278	0.500	pCi/g						
Bismuth−214		0.602	+/−0.0956	0.0528	+/−0.0956	0.200	pCi/g						
Californium−249	U	−0.00352	+/−0.0186	0.0318	+/−0.0186		pCi/g						
Cesium−137		0.250	+/−0.046	0.0329	+/−0.046	0.100	pCi/g						
Cobalt−60	U	0.00617	+/−0.0205	0.0353	+/−0.0205	0.100	pCi/g						
Curium−243	U	−0.000372	+/−0.0417	0.0702	+/−0.0417		pCi/g						
Europium−155	U	0.00203	+/−0.0458	0.0807	+/−0.0458	0.500	pCi/g						
Lead−212		0.858	+/−0.0759	0.0433	+/−0.0759	0.100	pCi/g						
Lead−214		0.643	+/−0.0873	0.0566	+/−0.0873	0.100	pCi/g						
Neptunium−236	U	0.0109	+/−0.0306	0.042	+/−0.0306		pCi/g						
Neptunium−237	UI	0.498	+/−0.151	0.146	+/−0.151		pCi/g						
Neptunium−239	U	0.00742	+/−0.103	0.174	+/−0.103	2.00	pCi/g						
Polonium−209	U	−1.35	+/−3.83	5.48	+/−3.83		pCi/g						
Potassium−40		3.87	+/−0.565	0.281	+/−0.565	1.00	pCi/g						
Protactinium−233	U	0.0074	+/−0.0308	0.0513	+/−0.0308		pCi/g						
Protactinium−234m	U	−0.119	+/−2.33	3.82	+/−2.33		pCi/g						
Radium−223	UI	0.277	+/−0.145	0.136	+/−0.145		pCi/g						
Rhodium−101	U	0.00722	+/−0.0168	0.0275	+/−0.0168		pCi/g						
Thallium−208		0.231	+/−0.0475	0.0298	+/−0.0475	0.080	pCi/g						
Thorium−234		1.08	+/−0.334	0.323	+/−0.334	0.500	pCi/g						
Uranium−235	U	−0.0586	+/−0.0948	0.148	+/−0.0948	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2329−ST Project: SCAN00101
Sample ID: 198701008 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2330−ST
Sample ID: 198701009
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date Time	Batch	Mtd
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid												
Actinium−228		0.852	+/−0.189	0.129	+/−0.189	0.800	pCi/g		MJH1	12/13/07 0737	708130	1
Americium−241	U	−0.0396	+/−0.100	0.148	+/−0.100	0.200	pCi/g					
Americium−243	UI	0.183	+/−0.0429	0.0519	+/−0.0429		pCi/g					
Americium−246	U	−0.0152	+/−0.0696	0.116	+/−0.0696		pCi/g					
Antimony−125	U	−0.0482	+/−0.0589	0.0916	+/−0.0589	0.200	pCi/g					
Bismuth−211	U	0.253	+/−0.604	1.04	+/−0.604		pCi/g					
Bismuth−212		0.719	+/−0.316	0.259	+/−0.316	0.500	pCi/g					
Bismuth−214		0.695	+/−0.110	0.0651	+/−0.110	0.200	pCi/g					
Californium−249	U	0.00213	+/−0.0259	0.0432	+/−0.0259		pCi/g					
Cesium−137		0.168	+/−0.0596	0.0383	+/−0.0596	0.100	pCi/g					
Cobalt−60	U	−0.00345	+/−0.0219	0.0367	+/−0.0219	0.100	pCi/g					
Curium−243	U	0.0748	+/−0.0549	0.0901	+/−0.0549		pCi/g					
Europium−155	U	0.0831	+/−0.061	0.111	+/−0.061	0.500	pCi/g					
Lead−212		0.890	+/−0.0851	0.0582	+/−0.0851	0.100	pCi/g					
Lead−214		0.723	+/−0.0989	0.0735	+/−0.0989	0.100	pCi/g					
Neptunium−236	U	0.0336	+/−0.031	0.0578	+/−0.031		pCi/g					
Neptunium−237	UI	0.661	+/−0.265	0.226	+/−0.265		pCi/g					
Neptunium−239	U	−0.0311	+/−0.133	0.225	+/−0.133	2.00	pCi/g					
Polonium−209	U	0.602	+/−4.41	7.40	+/−4.41		pCi/g					
Potassium−40		4.02	+/−0.675	0.357	+/−0.675	1.00	pCi/g					
Protactinium−233	U	0.0357	+/−0.0561	0.0652	+/−0.0561		pCi/g					
Protactinium−234m	U	1.66	+/−2.95	4.50	+/−2.95		pCi/g					
Radium−223	UI	0.258	+/−0.156	0.177	+/−0.156		pCi/g					
Rhodium−101	U	0.00569	+/−0.0236	0.0353	+/−0.0236		pCi/g					
Thallium−208		0.259	+/−0.0506	0.0335	+/−0.0506	0.080	pCi/g					
Thorium−234		1.02	+/−0.461	0.422	+/−0.461	0.500	pCi/g					
Uranium−235	U	0.0919	+/−0.144	0.203	+/−0.144	0.500	pCi/g					

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2330−ST Project: SCAN00101
Sample ID: 198701009 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2331−ST
Sample ID: 198701010
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date Time	Batch	Mtd
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid												
Actinium−228		1.24	+/−0.205	0.142	+/−0.205	0.800	pCi/g		MJH1	12/13/07 0737	708130	1
Americium−241	U	0.0503	+/−0.0869	0.127	+/−0.0869	0.200	pCi/g					
Americium−243	UI	0.249	+/−0.0478	0.0486	+/−0.0478		pCi/g					
Americium−246	U	0.022	+/−0.0855	0.147	+/−0.0855		pCi/g					
Antimony−125	U	−0.0419	+/−0.0607	0.0988	+/−0.0607	0.200	pCi/g					
Bismuth−211	U	0.268	+/−0.680	1.05	+/−0.680		pCi/g					
Bismuth−212		0.866	+/−0.320	0.288	+/−0.320	0.500	pCi/g					
Bismuth−214		1.36	+/−0.152	0.0732	+/−0.152	0.200	pCi/g					
Californium−249	U	0.0132	+/−0.0273	0.0472	+/−0.0273		pCi/g					
Cesium−137		0.160	+/−0.049	0.042	+/−0.049	0.100	pCi/g					
Cobalt−60	U	0.00886	+/−0.029	0.0487	+/−0.029	0.100	pCi/g					
Curium−243	U	−0.0133	+/−0.0695	0.101	+/−0.0695		pCi/g					
Europium−155	U	0.0254	+/−0.0781	0.107	+/−0.0781	0.500	pCi/g					
Lead−212		1.16	+/−0.102	0.0614	+/−0.102	0.100	pCi/g					
Lead−214		1.32	+/−0.140	0.0711	+/−0.140	0.100	pCi/g					
Neptunium−236	U	0.033	+/−0.0407	0.062	+/−0.0407		pCi/g					
Neptunium−237	UI	0.704	+/−0.176	0.213	+/−0.176		pCi/g					
Neptunium−239	U	0.140	+/−0.144	0.256	+/−0.144	2.00	pCi/g					
Polonium−209	U	−0.727	+/−4.61	7.76	+/−4.61		pCi/g					
Potassium−40		8.59	+/−0.918	0.355	+/−0.918	1.00	pCi/g					
Protactinium−233	U	−0.031	+/−0.0464	0.066	+/−0.0464		pCi/g					
Protactinium−234m	U	−0.102	+/−3.11	4.81	+/−3.11		pCi/g					
Radium−223	UI	0.232	+/−0.169	0.198	+/−0.169		pCi/g					
Rhodium−101	U	0.0129	+/−0.0221	0.0391	+/−0.0221		pCi/g					
Thallium−208		0.312	+/−0.0582	0.036	+/−0.0582	0.080	pCi/g					
Thorium−234		1.88	+/−0.513	0.471	+/−0.513	0.500	pCi/g					
Uranium−235	U	0.102	+/−0.165	0.216	+/−0.165	0.500	pCi/g					

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2331−ST Project: SCAN00101
Sample ID: 198701010 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID:	SB−CZ−SS−2332−ST	Project:	SCAN00101
Sample ID:	198701011	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.580	+/−0.156	0.121	+/−0.156	0.800	pCi/g		MJH1	12/13/07	0739	708130	1
Americium−241	U	0.00159	+/−0.102	0.163	+/−0.102	0.200	pCi/g						
Americium−243	UI	0.0907	+/−0.0401	0.0474	+/−0.0401		pCi/g						
Americium−246	U	−0.00999	+/−0.0658	0.110	+/−0.0658		pCi/g						
Antimony−125	U	0.0118	+/−0.0559	0.0947	+/−0.0559	0.200	pCi/g						
Bismuth−211	U	−0.316	+/−0.674	0.904	+/−0.674		pCi/g						
Bismuth−212		0.431	+/−0.259	0.255	+/−0.259	0.500	pCi/g						
Bismuth−214		0.340	+/−0.0926	0.0645	+/−0.0926	0.200	pCi/g						
Californium−249	U	−0.0142	+/−0.0228	0.0369	+/−0.0228		pCi/g						
Cesium−137		0.275	+/−0.0471	0.0385	+/−0.0471	0.100	pCi/g						
Cobalt−60	U	0.00994	+/−0.0184	0.0399	+/−0.0184	0.100	pCi/g						
Curium−243	UI	0.110	+/−0.074	0.0801	+/−0.074		pCi/g						
Europium−155	UI	0.123	+/−0.0822	0.0897	+/−0.0822	0.500	pCi/g						
Lead−212		0.352	+/−0.0655	0.0764	+/−0.0655	0.100	pCi/g						
Lead−214		0.367	+/−0.0874	0.0621	+/−0.0874	0.100	pCi/g						
Neptunium−236	U	−0.00985	+/−0.0364	0.0541	+/−0.0364		pCi/g						
Neptunium−237	U	0.187	+/−0.124	0.224	+/−0.124		pCi/g						
Neptunium−239	U	0.00659	+/−0.123	0.202	+/−0.123	2.00	pCi/g						
Polonium−209	U	2.39	+/−3.81	6.73	+/−3.81		pCi/g						
Potassium−40		2.89	+/−0.543	0.302	+/−0.543	1.00	pCi/g						
Protactinium−233	U	0.0225	+/−0.0341	0.0605	+/−0.0341		pCi/g						
Protactinium−234m	U	2.89	+/−4.05	3.89	+/−4.05		pCi/g						
Radium−223	UI	0.224	+/−0.143	0.149	+/−0.143		pCi/g						
Rhodium−101	U	0.0073	+/−0.0198	0.0309	+/−0.0198		pCi/g						
Thallium−208		0.147	+/−0.048	0.030	+/−0.048	0.080	pCi/g						
Thorium−234		0.877	+/−0.514	0.446	+/−0.514	0.500	pCi/g						
Uranium−235	U	0.0771	+/−0.136	0.161	+/−0.136	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2332−ST Project: SCAN00101
Sample ID: 198701011 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2333−ST
Sample ID: 198701012
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.710	+/−0.169	0.118	+/−0.169	0.800	pCi/g		MJH1	12/13/07	0829	708130	1
Americium−241	U	0.0372	+/−0.102	0.120	+/−0.102	0.200	pCi/g						
Americium−243	UI	0.116	+/−0.0338	0.0451	+/−0.0338		pCi/g						
Americium−246	U	0.0282	+/−0.0714	0.126	+/−0.0714		pCi/g						
Antimony−125	U	−0.00199	+/−0.0522	0.0898	+/−0.0522	0.200	pCi/g						
Bismuth−211	U	−0.00424	+/−0.562	0.932	+/−0.562		pCi/g						
Bismuth−212		0.396	+/−0.235	0.252	+/−0.235	0.500	pCi/g						
Bismuth−214	UI	0.485	+/−0.0978	0.144	+/−0.0978	0.200	pCi/g						
Californium−249	U	−0.00171	+/−0.0221	0.0382	+/−0.0221		pCi/g						
Cesium−137		0.214	+/−0.045	0.035	+/−0.045	0.100	pCi/g						
Cobalt−60	U	0.00207	+/−0.0218	0.0373	+/−0.0218	0.100	pCi/g						
Curium−243	U	0.014	+/−0.0537	0.083	+/−0.0537		pCi/g						
Europium−155	UI	0.120	+/−0.0999	0.0901	+/−0.0999	0.500	pCi/g						
Lead−212		0.602	+/−0.0696	0.0531	+/−0.0696	0.100	pCi/g						
Lead−214		0.658	+/−0.0936	0.0614	+/−0.0936	0.100	pCi/g						
Neptunium−236	U	−0.0029	+/−0.0361	0.052	+/−0.0361		pCi/g						
Neptunium−237	UI	0.382	+/−0.121	0.200	+/−0.121		pCi/g						
Neptunium−239	U	−0.0389	+/−0.118	0.195	+/−0.118	2.00	pCi/g						
Polonium−209	U	1.24	+/−3.75	6.40	+/−3.75		pCi/g						
Potassium−40		5.13	+/−0.640	0.272	+/−0.640	1.00	pCi/g						
Protactinium−233	U	−0.00771	+/−0.0351	0.0573	+/−0.0351		pCi/g						
Protactinium−234m	U	1.81	+/−3.68	3.63	+/−3.68		pCi/g						
Radium−223	UI	0.351	+/−0.218	0.154	+/−0.218		pCi/g						
Rhodium−101	U	0.00154	+/−0.0207	0.0327	+/−0.0207		pCi/g						
Thallium−208		0.177	+/−0.0456	0.0296	+/−0.0456	0.080	pCi/g						
Thorium−234		0.586	+/−0.357	0.410	+/−0.357	0.500	pCi/g						
Uranium−235	U	0.0913	+/−0.142	0.181	+/−0.142	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2333−ST Project: SCAN00101
Sample ID: 198701012 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2334−ST
Sample ID: 198701013
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date Time	Batch	Mtd
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid												
Actinium−228		0.832	+/−0.167	0.109	+/−0.167	0.800	pCi/g		MJH1	12/13/07 0856	708130	1
Americium−241	U	0.0626	+/−0.067	0.106	+/−0.067	0.200	pCi/g					
Americium−243	UI	0.182	+/−0.0554	0.0381	+/−0.0554		pCi/g					
Americium−246	U	0.014	+/−0.0672	0.0979	+/−0.0672		pCi/g					
Antimony−125	U	0.0233	+/−0.0445	0.0766	+/−0.0445	0.200	pCi/g					
Bismuth−211	U	0.396	+/−0.525	0.819	+/−0.525		pCi/g					
Bismuth−212		0.544	+/−0.205	0.208	+/−0.205	0.500	pCi/g					
Bismuth−214		0.805	+/−0.101	0.0519	+/−0.101	0.200	pCi/g					
Californium−249	U	0.011	+/−0.0204	0.031	+/−0.0204		pCi/g					
Cesium−137		0.159	+/−0.0313	0.0298	+/−0.0313	0.100	pCi/g					
Cobalt−60	U	0.00175	+/−0.0185	0.0308	+/−0.0185	0.100	pCi/g					
Curium−243	U	0.0414	+/−0.0517	0.0821	+/−0.0517		pCi/g					
Europium−155	U	0.046	+/−0.0574	0.0898	+/−0.0574	0.500	pCi/g					
Lead−212		0.909	+/−0.0754	0.0463	+/−0.0754	0.100	pCi/g					
Lead−214		0.925	+/−0.093	0.0541	+/−0.093	0.100	pCi/g					
Neptunium−236	U	0.0308	+/−0.0327	0.0523	+/−0.0327		pCi/g					
Neptunium−237	UI	0.511	+/−0.145	0.169	+/−0.145		pCi/g					
Neptunium−239	U	−0.0573	+/−0.120	0.185	+/−0.120	2.00	pCi/g					
Polonium−209	U	−0.499	+/−3.25	5.49	+/−3.25		pCi/g					
Potassium−40		7.38	+/−0.730	0.227	+/−0.730	1.00	pCi/g					
Protactinium−233	U	−0.00297	+/−0.0302	0.052	+/−0.0302		pCi/g					
Protactinium−234m	U	1.16	+/−2.56	3.47	+/−2.56		pCi/g					
Radium−223	UI	0.450	+/−0.159	0.143	+/−0.159		pCi/g					
Rhodium−101	U	−0.00678	+/−0.0192	0.0297	+/−0.0192		pCi/g					
Thallium−208		0.252	+/−0.0384	0.027	+/−0.0384	0.080	pCi/g					
Thorium−234		0.661	+/−0.319	0.371	+/−0.319	0.500	pCi/g					
Uranium−235	U	−0.0952	+/−0.109	0.175	+/−0.109	0.500	pCi/g					

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2334−ST Project: SCAN00101
Sample ID: 198701013 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2335−ST
Sample ID: 198701014
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.02	+/−0.272	0.206	+/−0.272	0.800	pCi/g		MJH1	12/13/07	0903	708130	1
Americium−241	U	0.0234	+/−0.0418	0.0658	+/−0.0418	0.200	pCi/g						
Americium−243	UI	0.226	+/−0.0401	0.039	+/−0.0401		pCi/g						
Americium−246	U	−0.0459	+/−0.100	0.162	+/−0.100		pCi/g						
Antimony−125	U	0.0031	+/−0.0775	0.129	+/−0.0775	0.200	pCi/g						
Bismuth−211	U	0.230	+/−0.853	1.45	+/−0.853		pCi/g						
Bismuth−212		0.781	+/−0.449	0.375	+/−0.449	0.500	pCi/g						
Bismuth−214		0.865	+/−0.136	0.0957	+/−0.136	0.200	pCi/g						
Californium−249	U	−0.00612	+/−0.032	0.0531	+/−0.032		pCi/g						
Cesium−137		0.219	+/−0.0624	0.0533	+/−0.0624	0.100	pCi/g						
Cobalt−60	U	0.0184	+/−0.0342	0.0601	+/−0.0342	0.100	pCi/g						
Curium−243	U	0.0564	+/−0.077	0.102	+/−0.077		pCi/g						
Europium−155	U	0.0626	+/−0.0856	0.122	+/−0.0856	0.500	pCi/g						
Lead−212		1.12	+/−0.125	0.069	+/−0.125	0.100	pCi/g						
Lead−214		1.02	+/−0.138	0.0915	+/−0.138	0.100	pCi/g						
Neptunium−236	UI	0.0658	+/−0.0509	0.0608	+/−0.0509		pCi/g						
Neptunium−237	UI	0.818	+/−0.179	0.202	+/−0.179		pCi/g						
Neptunium−239	U	0.011	+/−0.178	0.292	+/−0.178	2.00	pCi/g						
Polonium−209	U	1.32	+/−6.24	10.5	+/−6.24		pCi/g						
Potassium−40		5.49	+/−0.878	0.429	+/−0.878	1.00	pCi/g						
Protactinium−233	U	−0.00166	+/−0.0517	0.0877	+/−0.0517		pCi/g						
Protactinium−234m	UI	6.26	+/−5.61	5.83	+/−5.61		pCi/g						
Radium−223	UI	0.496	+/−0.193	0.214	+/−0.193		pCi/g						
Rhodium−101	U	0.00281	+/−0.0307	0.0463	+/−0.0307		pCi/g						
Thallium−208		0.379	+/−0.0666	0.0452	+/−0.0666	0.080	pCi/g						
Thorium−234		1.61	+/−0.428	0.471	+/−0.428	0.500	pCi/g						
Uranium−235	U	0.119	+/−0.182	0.249	+/−0.182	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2335−ST Project: SCAN00101
Sample ID: 198701014 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2322−SD
Sample ID: 198701015
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.554	+/−0.143	0.103	+/−0.143	0.800	pCi/g		MJH1	12/13/07	1059	708130	1
Americium−241	U	0.0155	+/−0.0585	0.0893	+/−0.0585	0.200	pCi/g						
Americium−243	UI	0.132	+/−0.0309	0.0339	+/−0.0309		pCi/g						
Americium−246	U	0.0414	+/−0.0645	0.114	+/−0.0645		pCi/g						
Antimony−125	U	0.0219	+/−0.0458	0.0786	+/−0.0458	0.200	pCi/g						
Bismuth−211	U	−0.0672	+/−0.523	0.751	+/−0.523		pCi/g						
Bismuth−212		0.332	+/−0.247	0.202	+/−0.247	0.500	pCi/g						
Bismuth−214		0.482	+/−0.0733	0.0531	+/−0.0733	0.200	pCi/g						
Californium−249	U	0.0114	+/−0.0205	0.0354	+/−0.0205		pCi/g						
Cesium−137		0.101	+/−0.0333	0.0277	+/−0.0333	0.100	pCi/g						
Cobalt−60	U	0.00412	+/−0.0182	0.0308	+/−0.0182	0.100	pCi/g						
Curium−243	U	−0.00874	+/−0.0401	0.0706	+/−0.0401		pCi/g						
Europium−155	U	0.0403	+/−0.0461	0.0842	+/−0.0461	0.500	pCi/g						
Lead−212		0.553	+/−0.0598	0.0458	+/−0.0598	0.100	pCi/g						
Lead−214		0.527	+/−0.0787	0.0564	+/−0.0787	0.100	pCi/g						
Neptunium−236	U	−0.0249	+/−0.0306	0.0442	+/−0.0306		pCi/g						
Neptunium−237	UI	0.326	+/−0.128	0.158	+/−0.128		pCi/g						
Neptunium−239	U	0.0836	+/−0.108	0.192	+/−0.108	2.00	pCi/g						
Polonium−209	U	1.47	+/−3.22	5.65	+/−3.22		pCi/g						
Potassium−40		3.21	+/−0.555	0.212	+/−0.555	1.00	pCi/g						
Protactinium−233	U	0.0178	+/−0.0309	0.054	+/−0.0309		pCi/g						
Protactinium−234m	U	−0.49	+/−2.42	3.73	+/−2.42		pCi/g						
Radium−223	UI	0.235	+/−0.131	0.151	+/−0.131		pCi/g						
Rhodium−101	U	0.00821	+/−0.0234	0.0277	+/−0.0234		pCi/g						
Thallium−208		0.166	+/−0.0358	0.0281	+/−0.0358	0.080	pCi/g						
Thorium−234		0.739	+/−0.386	0.350	+/−0.386	0.500	pCi/g						
Uranium−235	U	0.00429	+/−0.139	0.162	+/−0.139	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2322−SD Project: SCAN00101
Sample ID: 198701015 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2323−SD
Sample ID: 198701016
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.599	+/−0.162	0.114	+/−0.162	0.800	pCi/g		MJH1	12/13/07	1115	708130	1
Americium−241	U	0.0325	+/−0.0655	0.104	+/−0.0655	0.200	pCi/g						
Americium−243	UI	0.143	+/−0.0381	0.0397	+/−0.0381		pCi/g						
Americium−246	U	−0.0428	+/−0.0715	0.113	+/−0.0715		pCi/g						
Antimony−125	U	0.0575	+/−0.0474	0.0863	+/−0.0474	0.200	pCi/g						
Bismuth−211	U	−0.115	+/−0.554	0.933	+/−0.554		pCi/g						
Bismuth−212		0.409	+/−0.244	0.232	+/−0.244	0.500	pCi/g						
Bismuth−214		0.464	+/−0.084	0.0633	+/−0.084	0.200	pCi/g						
Californium−249	U	0.0109	+/−0.0196	0.0346	+/−0.0196		pCi/g						
Cesium−137	U	0.0257	+/−0.0314	0.0319	+/−0.0314	0.100	pCi/g						
Cobalt−60	U	0.0203	+/−0.0196	0.036	+/−0.0196	0.100	pCi/g						
Curium−243	U	0.0504	+/−0.0569	0.0808	+/−0.0569		pCi/g						
Europium−155	U	0.0561	+/−0.0632	0.0854	+/−0.0632	0.500	pCi/g						
Lead−212		0.687	+/−0.0665	0.0484	+/−0.0665	0.100	pCi/g						
Lead−214		0.470	+/−0.0768	0.059	+/−0.0768	0.100	pCi/g						
Neptunium−236	U	0.0319	+/−0.0337	0.0515	+/−0.0337		pCi/g						
Neptunium−237	UI	0.396	+/−0.141	0.174	+/−0.141		pCi/g						
Neptunium−239	U	0.007	+/−0.114	0.191	+/−0.114	2.00	pCi/g						
Polonium−209	U	1.51	+/−3.65	6.42	+/−3.65		pCi/g						
Potassium−40		6.17	+/−0.744	0.295	+/−0.744	1.00	pCi/g						
Protactinium−233	U	0.0193	+/−0.0321	0.0572	+/−0.0321		pCi/g						
Protactinium−234m	U	0.0758	+/−2.64	3.99	+/−2.64		pCi/g						
Radium−223	UI	0.415	+/−0.168	0.147	+/−0.168		pCi/g						
Rhodium−101	U	−0.00625	+/−0.0191	0.0297	+/−0.0191		pCi/g						
Thallium−208		0.233	+/−0.0485	0.0302	+/−0.0485	0.080	pCi/g						
Thorium−234		1.02	+/−0.371	0.383	+/−0.371	0.500	pCi/g						
Uranium−235	U	0.0012	+/−0.111	0.180	+/−0.111	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2323−SD Project: SCAN00101
Sample ID: 198701016 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2324−SD
Sample ID: 198701017
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.08	+/−0.212	0.130	+/−0.212	0.800	pCi/g		MJH1	12/13/07	1331	708131	1
Americium−241	U	0.0177	+/−0.0298	0.0506	+/−0.0298	0.200	pCi/g						
Americium−243	UI	0.159	+/−0.0293	0.0314	+/−0.0293		pCi/g						
Americium−246	U	−0.0244	+/−0.0831	0.140	+/−0.0831		pCi/g						
Antimony−125	U	0.00226	+/−0.0603	0.105	+/−0.0603	0.200	pCi/g						
Bismuth−211	U	−0.217	+/−0.738	1.05	+/−0.738		pCi/g						
Bismuth−212		0.962	+/−0.308	0.297	+/−0.308	0.500	pCi/g						
Bismuth−214		0.721	+/−0.108	0.0728	+/−0.108	0.200	pCi/g						
Californium−249	U	0.0143	+/−0.0246	0.0442	+/−0.0246		pCi/g						
Cesium−137	U	0.0388	+/−0.0338	0.0413	+/−0.0338	0.100	pCi/g						
Cobalt−60	U	0.00216	+/−0.0243	0.042	+/−0.0243	0.100	pCi/g						
Curium−243	U	0.0576	+/−0.0664	0.0896	+/−0.0664		pCi/g						
Europium−155	U	0.064	+/−0.0738	0.0984	+/−0.0738	0.500	pCi/g						
Lead−212		1.01	+/−0.105	0.0589	+/−0.105	0.100	pCi/g						
Lead−214		0.830	+/−0.104	0.0737	+/−0.104	0.100	pCi/g						
Neptunium−236	U	0.0487	+/−0.0386	0.0505	+/−0.0386		pCi/g						
Neptunium−237	UI	0.440	+/−0.123	0.171	+/−0.123		pCi/g						
Neptunium−239	U	−0.0324	+/−0.154	0.228	+/−0.154	2.00	pCi/g						
Polonium−209	U	0.456	+/−4.72	8.06	+/−4.72		pCi/g						
Potassium−40		7.78	+/−1.01	0.333	+/−1.01	1.00	pCi/g						
Protactinium−233	U	0.0162	+/−0.0373	0.0677	+/−0.0373		pCi/g						
Protactinium−234m	U	2.45	+/−2.89	5.15	+/−2.89		pCi/g						
Radium−223	UI	0.319	+/−0.174	0.180	+/−0.174		pCi/g						
Rhodium−101	U	0.0101	+/−0.0231	0.0378	+/−0.0231		pCi/g						
Thallium−208		0.310	+/−0.0538	0.0384	+/−0.0538	0.080	pCi/g						
Thorium−234		1.58	+/−0.397	0.398	+/−0.397	0.500	pCi/g						
Uranium−235	U	−0.00764	+/−0.121	0.206	+/−0.121	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2324−SD Project: SCAN00101
Sample ID: 198701017 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2325−SD
Sample ID: 198701018
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.42	+/−0.218	0.115	+/−0.218	0.800	pCi/g		MJH1	12/13/07	1642	708131	1
Americium−241	U	0.0454	+/−0.0694	0.110	+/−0.0694	0.200	pCi/g						
Americium−243	UI	0.302	+/−0.0489	0.0441	+/−0.0489		pCi/g						
Americium−246	U	0.0213	+/−0.0701	0.119	+/−0.0701		pCi/g						
Antimony−125	U	0.0225	+/−0.0529	0.0914	+/−0.0529	0.200	pCi/g						
Bismuth−211	U	−0.135	+/−0.567	0.957	+/−0.567		pCi/g						
Bismuth−212		0.791	+/−0.265	0.254	+/−0.265	0.500	pCi/g						
Bismuth−214		0.928	+/−0.115	0.064	+/−0.115	0.200	pCi/g						
Californium−249	U	0.0328	+/−0.0229	0.0408	+/−0.0229		pCi/g						
Cesium−137	U	0.0147	+/−0.0249	0.0336	+/−0.0249	0.100	pCi/g						
Cobalt−60	U	−0.00718	+/−0.0206	0.0335	+/−0.0206	0.100	pCi/g						
Curium−243	UI	0.0939	+/−0.0696	0.093	+/−0.0696		pCi/g						
Europium−155	UI	0.104	+/−0.0773	0.104	+/−0.0773	0.500	pCi/g						
Lead−212		1.45	+/−0.118	0.0572	+/−0.118	0.100	pCi/g						
Lead−214		1.08	+/−0.109	0.0651	+/−0.109	0.100	pCi/g						
Neptunium−236	U	0.0411	+/−0.0374	0.0588	+/−0.0374		pCi/g						
Neptunium−237	UI	0.907	+/−0.193	0.192	+/−0.193		pCi/g						
Neptunium−239	U	−0.0797	+/−0.138	0.227	+/−0.138	2.00	pCi/g						
Polonium−209	U	1.51	+/−3.81	6.59	+/−3.81		pCi/g						
Potassium−40		8.50	+/−0.781	0.298	+/−0.781	1.00	pCi/g						
Protactinium−233	U	0.0137	+/−0.0362	0.0635	+/−0.0362		pCi/g						
Protactinium−234m	UI	4.23	+/−3.38	3.55	+/−3.38		pCi/g						
Radium−223	UI	0.575	+/−0.169	0.183	+/−0.169		pCi/g						
Rhodium−101	U	−0.00518	+/−0.0236	0.0354	+/−0.0236		pCi/g						
Thallium−208		0.433	+/−0.0591	0.0315	+/−0.0591	0.080	pCi/g						
Thorium−234		1.02	+/−0.470	0.424	+/−0.470	0.500	pCi/g						
Uranium−235	U	0.0581	+/−0.169	0.208	+/−0.169	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2325−SD Project: SCAN00101
Sample ID: 198701018 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2326−SD
Sample ID: 198701019
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.934	+/−0.169	0.0996	+/−0.169	0.800	pCi/g		MJH1	12/14/07	0107	708131	1
Americium−241	U	0.068	+/−0.0619	0.101	+/−0.0619	0.200	pCi/g						
Americium−243	UI	0.167	+/−0.0369	0.0384	+/−0.0369		pCi/g						
Americium−246	U	0.0349	+/−0.064	0.0954	+/−0.064		pCi/g						
Antimony−125	U	0.00171	+/−0.0475	0.0815	+/−0.0475	0.200	pCi/g						
Bismuth−211	U	−0.285	+/−0.490	0.813	+/−0.490		pCi/g						
Bismuth−212		0.441	+/−0.236	0.234	+/−0.236	0.500	pCi/g						
Bismuth−214		0.655	+/−0.0905	0.0538	+/−0.0905	0.200	pCi/g						
Californium−249	U	−0.00192	+/−0.0203	0.035	+/−0.0203		pCi/g						
Cesium−137	U	0.0027	+/−0.0221	0.0318	+/−0.0221	0.100	pCi/g						
Cobalt−60	U	0.00428	+/−0.0176	0.0298	+/−0.0176	0.100	pCi/g						
Curium−243	U	0.0364	+/−0.0737	0.0845	+/−0.0737		pCi/g						
Europium−155	U	0.0362	+/−0.0526	0.0926	+/−0.0526	0.500	pCi/g						
Lead−212		1.01	+/−0.0906	0.0493	+/−0.0906	0.100	pCi/g						
Lead−214		0.642	+/−0.079	0.0602	+/−0.079	0.100	pCi/g						
Neptunium−236	UI	0.0627	+/−0.0409	0.0541	+/−0.0409		pCi/g						
Neptunium−237	UI	0.548	+/−0.145	0.182	+/−0.145		pCi/g						
Neptunium−239	U	−0.038	+/−0.121	0.201	+/−0.121	2.00	pCi/g						
Polonium−209	U	0.403	+/−3.31	5.67	+/−3.31		pCi/g						
Potassium−40		3.78	+/−0.552	0.274	+/−0.552	1.00	pCi/g						
Protactinium−233	U	−0.0207	+/−0.0325	0.0556	+/−0.0325		pCi/g						
Protactinium−234m	U	0.918	+/−2.54	3.66	+/−2.54		pCi/g						
Radium−223	UI	0.190	+/−0.128	0.153	+/−0.128		pCi/g						
Rhodium−101	U	0.0063	+/−0.0237	0.0304	+/−0.0237		pCi/g						
Thallium−208		0.317	+/−0.0453	0.0284	+/−0.0453	0.080	pCi/g						
Thorium−234		0.605	+/−0.400	0.403	+/−0.400	0.500	pCi/g						
Uranium−235	U	0.0915	+/−0.202	0.182	+/−0.202	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2326−SD Project: SCAN00101
Sample ID: 198701019 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2327−SD
Sample ID: 198701020
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.20	+/−0.172	0.102	+/−0.172	0.800	pCi/g		MJH1	12/13/07	1835	708131	1
Americium−241	UI	0.0431	+/−0.025	0.0413	+/−0.025	0.200	pCi/g						
Americium−243	UI	0.199	+/−0.0259	0.0246	+/−0.0259		pCi/g						
Americium−246	U	−0.00111	+/−0.0557	0.095	+/−0.0557		pCi/g						
Antimony−125	U	0.0238	+/−0.0458	0.079	+/−0.0458	0.200	pCi/g						
Bismuth−211	U	−0.319	+/−0.621	0.857	+/−0.621		pCi/g						
Bismuth−212		0.807	+/−0.279	0.229	+/−0.279	0.500	pCi/g						
Bismuth−214		0.377	+/−0.0812	0.0589	+/−0.0812	0.200	pCi/g						
Californium−249	U	0.013	+/−0.019	0.0332	+/−0.019		pCi/g						
Cesium−137	U	0.0177	+/−0.0236	0.0314	+/−0.0236	0.100	pCi/g						
Cobalt−60	U	0.00696	+/−0.00978	0.0296	+/−0.00978	0.100	pCi/g						
Curium−243	U	0.0531	+/−0.0413	0.0633	+/−0.0413		pCi/g						
Europium−155	U	0.059	+/−0.0459	0.0714	+/−0.0459	0.500	pCi/g						
Lead−212		1.27	+/−0.119	0.0425	+/−0.119	0.100	pCi/g						
Lead−214		0.489	+/−0.0776	0.0537	+/−0.0776	0.100	pCi/g						
Neptunium−236	UI	0.0428	+/−0.0314	0.0397	+/−0.0314		pCi/g						
Neptunium−237	UI	0.562	+/−0.110	0.136	+/−0.110		pCi/g						
Neptunium−239	U	−0.0298	+/−0.104	0.172	+/−0.104	2.00	pCi/g						
Polonium−209	U	3.54	+/−3.49	5.93	+/−3.49		pCi/g						
Potassium−40		3.63	+/−0.499	0.270	+/−0.499	1.00	pCi/g						
Protactinium−233	U	−0.00466	+/−0.0304	0.0522	+/−0.0304		pCi/g						
Protactinium−234m	U	2.91	+/−2.40	3.41	+/−2.40		pCi/g						
Radium−223	UI	0.350	+/−0.134	0.134	+/−0.134		pCi/g						
Rhodium−101	U	0.0087	+/−0.0198	0.0275	+/−0.0198		pCi/g						
Thallium−208		0.430	+/−0.0483	0.029	+/−0.0483	0.080	pCi/g						
Thorium−234		1.79	+/−0.319	0.317	+/−0.319	0.500	pCi/g						
Uranium−235	U	0.130	+/−0.128	0.152	+/−0.128	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2327−SD Project: SCAN00101
Sample ID: 198701020 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID:	SB−CZ−SS−2328−SD	Project:	SCAN00101
Sample ID:	198701021	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.08	+/−0.171	0.120	+/−0.171	0.800	pCi/g		MJH1	12/13/07	1836	708131	1
Americium−241	U	0.0231	+/−0.023	0.0366	+/−0.023	0.200	pCi/g						
Americium−243	UI	0.199	+/−0.0248	0.0211	+/−0.0248		pCi/g						
Americium−246	U	0.0979	+/−0.0703	0.129	+/−0.0703		pCi/g						
Antimony−125	U	0.0311	+/−0.0442	0.0775	+/−0.0442	0.200	pCi/g						
Bismuth−211	U	−0.32	+/−0.551	0.915	+/−0.551		pCi/g						
Bismuth−212		0.757	+/−0.246	0.234	+/−0.246	0.500	pCi/g						
Bismuth−214		0.668	+/−0.0945	0.0575	+/−0.0945	0.200	pCi/g						
Californium−249	U	0.00539	+/−0.019	0.033	+/−0.019		pCi/g						
Cesium−137	U	−0.00118	+/−0.0196	0.034	+/−0.0196	0.100	pCi/g						
Cobalt−60	U	−0.00167	+/−0.020	0.0333	+/−0.020	0.100	pCi/g						
Curium−243	U	0.0424	+/−0.0384	0.0552	+/−0.0384		pCi/g						
Europium−155	U	0.0471	+/−0.0426	0.0636	+/−0.0426	0.500	pCi/g						
Lead−212		1.19	+/−0.0876	0.0403	+/−0.0876	0.100	pCi/g						
Lead−214		0.681	+/−0.0749	0.0514	+/−0.0749	0.100	pCi/g						
Neptunium−236	UI	0.0504	+/−0.0261	0.0306	+/−0.0261		pCi/g						
Neptunium−237	UI	0.499	+/−0.090	0.114	+/−0.090		pCi/g						
Neptunium−239	U	0.0488	+/−0.0952	0.170	+/−0.0952	2.00	pCi/g						
Polonium−209	U	2.05	+/−3.48	6.16	+/−3.48		pCi/g						
Potassium−40		6.66	+/−0.732	0.314	+/−0.732	1.00	pCi/g						
Protactinium−233	U	−0.0063	+/−0.0278	0.0479	+/−0.0278		pCi/g						
Protactinium−234m	U	1.81	+/−1.86	3.44	+/−1.86		pCi/g						
Radium−223	UI	0.305	+/−0.125	0.131	+/−0.125		pCi/g						
Rhodium−101	U	0.00396	+/−0.0156	0.0247	+/−0.0156		pCi/g						
Thallium−208		0.373	+/−0.0479	0.0294	+/−0.0479	0.080	pCi/g						
Thorium−234		1.39	+/−0.254	0.258	+/−0.254	0.500	pCi/g						
Uranium−235	U	0.0622	+/−0.089	0.135	+/−0.089	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2328−SD Project: SCAN00101
Sample ID: 198701021 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2329−SD
Sample ID: 198701022
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.690	+/−0.102	0.0525	+/−0.102	0.800	pCi/g		MJH1	12/13/07	1836	708131	1
Americium−241	U	0.0155	+/−0.0377	0.061	+/−0.0377	0.200	pCi/g						
Americium−243	UI	0.0984	+/−0.019	0.0236	+/−0.019		pCi/g						
Americium−246	U	0.0181	+/−0.033	0.0574	+/−0.033		pCi/g						
Antimony−125	U	0.00884	+/−0.0246	0.0429	+/−0.0246	0.200	pCi/g						
Bismuth−211	U	0.326	+/−0.299	0.473	+/−0.299		pCi/g						
Bismuth−212		0.403	+/−0.113	0.119	+/−0.113	0.500	pCi/g						
Bismuth−214		0.665	+/−0.0735	0.0322	+/−0.0735	0.200	pCi/g						
Californium−249	U	0.014	+/−0.0104	0.0189	+/−0.0104		pCi/g						
Cesium−137		0.0807	+/−0.0146	0.0158	+/−0.0146	0.100	pCi/g						
Cobalt−60	U	0.00195	+/−0.00954	0.0162	+/−0.00954	0.100	pCi/g						
Curium−243	UI	0.0619	+/−0.0317	0.0462	+/−0.0317		pCi/g						
Europium−155	UI	0.0688	+/−0.0352	0.0512	+/−0.0352	0.500	pCi/g						
Lead−212		0.676	+/−0.0503	0.0276	+/−0.0503	0.100	pCi/g						
Lead−214		0.768	+/−0.060	0.0311	+/−0.060	0.100	pCi/g						
Neptunium−236	U	0.0112	+/−0.0193	0.0292	+/−0.0193		pCi/g						
Neptunium−237	UI	0.335	+/−0.0759	0.0955	+/−0.0759		pCi/g						
Neptunium−239	U	−0.0261	+/−0.0746	0.112	+/−0.0746	2.00	pCi/g						
Polonium−209	U	−0.424	+/−1.81	3.11	+/−1.81		pCi/g						
Potassium−40		3.43	+/−0.335	0.140	+/−0.335	1.00	pCi/g						
Protactinium−233	U	−0.0117	+/−0.0171	0.0298	+/−0.0171		pCi/g						
Protactinium−234m	UI	2.64	+/−2.32	1.71	+/−2.32		pCi/g						
Radium−223	UI	0.199	+/−0.0866	0.0872	+/−0.0866		pCi/g						
Rhodium−101	U	−0.00529	+/−0.0123	0.0182	+/−0.0123		pCi/g						
Thallium−208		0.210	+/−0.0265	0.0151	+/−0.0265	0.080	pCi/g						
Thorium−234		0.631	+/−0.211	0.209	+/−0.211	0.500	pCi/g						
Uranium−235	U	0.0396	+/−0.0685	0.0999	+/−0.0685	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2329−SD Project: SCAN00101
Sample ID: 198701022 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2330−SD
Sample ID: 198701023
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.22	+/−0.180	0.0929	+/−0.180	0.800	pCi/g		MJH1	12/13/07	1837	708131	1
Americium−241	U	0.00507	+/−0.0713	0.109	+/−0.0713	0.200	pCi/g						
Americium−243	UI	0.128	+/−0.0371	0.0378	+/−0.0371		pCi/g						
Americium−246	U	0.00764	+/−0.0526	0.0903	+/−0.0526		pCi/g						
Antimony−125	U	−0.0296	+/−0.0431	0.0704	+/−0.0431	0.200	pCi/g						
Bismuth−211	U	−0.429	+/−0.530	0.844	+/−0.530		pCi/g						
Bismuth−212		0.816	+/−0.213	0.219	+/−0.213	0.500	pCi/g						
Bismuth−214		0.474	+/−0.066	0.0522	+/−0.066	0.200	pCi/g						
Californium−249	U	−0.00156	+/−0.0187	0.0317	+/−0.0187		pCi/g						
Cesium−137	U	0.00464	+/−0.0202	0.0307	+/−0.0202	0.100	pCi/g						
Cobalt−60	U	0.0198	+/−0.016	0.0293	+/−0.016	0.100	pCi/g						
Curium−243	U	0.0486	+/−0.0478	0.0614	+/−0.0478		pCi/g						
Europium−155	U	0.054	+/−0.0531	0.0693	+/−0.0531	0.500	pCi/g						
Lead−212		1.17	+/−0.0834	0.0419	+/−0.0834	0.100	pCi/g						
Lead−214		0.516	+/−0.0741	0.0509	+/−0.0741	0.100	pCi/g						
Neptunium−236	UI	0.0517	+/−0.0334	0.0358	+/−0.0334		pCi/g						
Neptunium−237	UI	0.316	+/−0.135	0.143	+/−0.135		pCi/g						
Neptunium−239	U	−0.0915	+/−0.0942	0.151	+/−0.0942	2.00	pCi/g						
Polonium−209	U	0.951	+/−3.33	5.60	+/−3.33		pCi/g						
Potassium−40		2.63	+/−0.489	0.245	+/−0.489	1.00	pCi/g						
Protactinium−233	U	−0.00804	+/−0.0269	0.0461	+/−0.0269		pCi/g						
Protactinium−234m	U	−0.609	+/−2.59	3.36	+/−2.59		pCi/g						
Radium−223	UI	0.369	+/−0.124	0.123	+/−0.124		pCi/g						
Rhodium−101	U	0.00114	+/−0.0179	0.024	+/−0.0179		pCi/g						
Thallium−208		0.371	+/−0.0449	0.0262	+/−0.0449	0.080	pCi/g						
Thorium−234		1.45	+/−0.332	0.296	+/−0.332	0.500	pCi/g						
Uranium−235	U	−0.0542	+/−0.107	0.137	+/−0.107	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2330−SD Project: SCAN00101
Sample ID: 198701023 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2331−SD
Sample ID: 198701024
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.23	+/−0.210	0.178	+/−0.210	0.800	pCi/g		MJH1	12/14/07	0510	708131	1
Americium−241	U	−0.000506	+/−0.0349	0.0547	+/−0.0349	0.200	pCi/g						
Americium−243	UI	0.242	+/−0.0361	0.0327	+/−0.0361		pCi/g						
Americium−246	U	−0.0717	+/−0.105	0.167	+/−0.105		pCi/g						
Antimony−125	U	0.00333	+/−0.0646	0.111	+/−0.0646	0.200	pCi/g						
Bismuth−211	U	−0.559	+/−0.773	1.26	+/−0.773		pCi/g						
Bismuth−212		0.772	+/−0.332	0.359	+/−0.332	0.500	pCi/g						
Bismuth−214		1.19	+/−0.148	0.0856	+/−0.148	0.200	pCi/g						
Californium−249	U	0.0115	+/−0.0277	0.0489	+/−0.0277		pCi/g						
Cesium−137	U	0.0493	+/−0.0285	0.0543	+/−0.0285	0.100	pCi/g						
Cobalt−60	U	0.0378	+/−0.0306	0.0571	+/−0.0306	0.100	pCi/g						
Curium−243	UI	0.0874	+/−0.0673	0.0846	+/−0.0673		pCi/g						
Europium−155	UI	0.0972	+/−0.0748	0.0909	+/−0.0748	0.500	pCi/g						
Lead−212		1.21	+/−0.101	0.0612	+/−0.101	0.100	pCi/g						
Lead−214		1.12	+/−0.130	0.0779	+/−0.130	0.100	pCi/g						
Neptunium−236	U	0.0228	+/−0.0325	0.0512	+/−0.0325		pCi/g						
Neptunium−237	UI	0.665	+/−0.131	0.159	+/−0.131		pCi/g						
Neptunium−239	U	−0.0732	+/−0.139	0.243	+/−0.139	2.00	pCi/g						
Polonium−209	U	−0.546	+/−5.32	9.05	+/−5.32		pCi/g						
Potassium−40		8.48	+/−1.03	0.499	+/−1.03	1.00	pCi/g						
Protactinium−233	U	0.0153	+/−0.0418	0.0742	+/−0.0418		pCi/g						
Protactinium−234m	U	1.62	+/−3.35	5.92	+/−3.35		pCi/g						
Radium−223	UI	0.385	+/−0.185	0.208	+/−0.185		pCi/g						
Rhodium−101	U	0.013	+/−0.022	0.0383	+/−0.022		pCi/g						
Thallium−208		0.392	+/−0.0647	0.0421	+/−0.0647	0.080	pCi/g						
Thorium−234		1.50	+/−0.376	0.370	+/−0.376	0.500	pCi/g						
Uranium−235	U	0.126	+/−0.122	0.217	+/−0.122	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2331−SD Project: SCAN00101
Sample ID: 198701024 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2332−SD
Sample ID: 198701025
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.591	+/−0.120	0.0866	+/−0.120	0.800	pCi/g		MJH1	12/14/07	0511	708131	1
Americium−241	U	0.0259	+/−0.0574	0.0889	+/−0.0574	0.200	pCi/g						
Americium−243	UI	0.0642	+/−0.0246	0.0348	+/−0.0246		pCi/g						
Americium−246	U	0.060	+/−0.0605	0.0836	+/−0.0605		pCi/g						
Antimony−125	U	−0.000809	+/−0.0399	0.0668	+/−0.0399	0.200	pCi/g						
Bismuth−211	U	0.0835	+/−0.405	0.704	+/−0.405		pCi/g						
Bismuth−212	U	0.131	+/−0.253	0.190	+/−0.253	0.500	pCi/g						
Bismuth−214		0.303	+/−0.0584	0.0411	+/−0.0584	0.200	pCi/g						
Californium−249	U	0.00893	+/−0.0192	0.0289	+/−0.0192		pCi/g						
Cesium−137		0.220	+/−0.0343	0.0263	+/−0.0343	0.100	pCi/g						
Cobalt−60	U	0.000805	+/−0.0165	0.0275	+/−0.0165	0.100	pCi/g						
Curium−243	U	0.00519	+/−0.0396	0.0702	+/−0.0396		pCi/g						
Europium−155	U	0.00737	+/−0.0438	0.0776	+/−0.0438	0.500	pCi/g						
Lead−212		0.591	+/−0.0593	0.041	+/−0.0593	0.100	pCi/g						
Lead−214		0.368	+/−0.0586	0.0496	+/−0.0586	0.100	pCi/g						
Neptunium−236	U	0.00159	+/−0.0305	0.0441	+/−0.0305		pCi/g						
Neptunium−237	UI	0.404	+/−0.189	0.148	+/−0.189		pCi/g						
Neptunium−239	U	−0.0958	+/−0.112	0.164	+/−0.112	2.00	pCi/g						
Polonium−209	U	−2.03	+/−2.97	4.81	+/−2.97		pCi/g						
Potassium−40		3.56	+/−0.452	0.228	+/−0.452	1.00	pCi/g						
Protactinium−233	U	−0.00302	+/−0.0259	0.0444	+/−0.0259		pCi/g						
Protactinium−234m	U	1.52	+/−2.52	3.31	+/−2.52		pCi/g						
Radium−223	UI	0.248	+/−0.134	0.129	+/−0.134		pCi/g						
Rhodium−101	U	0.00851	+/−0.0179	0.0279	+/−0.0179		pCi/g						
Thallium−208		0.191	+/−0.0314	0.0222	+/−0.0314	0.080	pCi/g						
Thorium−234		0.761	+/−0.319	0.321	+/−0.319	0.500	pCi/g						
Uranium−235	U	0.0593	+/−0.102	0.150	+/−0.102	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2332−SD Project: SCAN00101
Sample ID: 198701025 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2333−SD
Sample ID: 198701026
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.612	+/−0.160	0.118	+/−0.160	0.800	pCi/g		MJH1	12/14/07	0512	708131	1
Americium−241	U	0.0952	+/−0.0816	0.138	+/−0.0816	0.200	pCi/g						
Americium−243	UI	0.112	+/−0.0324	0.0393	+/−0.0324		pCi/g						
Americium−246	U	−0.0445	+/−0.072	0.116	+/−0.072		pCi/g						
Antimony−125	U	−0.00274	+/−0.0505	0.0861	+/−0.0505	0.200	pCi/g						
Bismuth−211	U	0.0116	+/−0.577	0.974	+/−0.577		pCi/g						
Bismuth−212		0.386	+/−0.270	0.229	+/−0.270	0.500	pCi/g						
Bismuth−214		0.468	+/−0.0901	0.0617	+/−0.0901	0.200	pCi/g						
Californium−249	U	0.00364	+/−0.0228	0.0397	+/−0.0228		pCi/g						
Cesium−137		0.0636	+/−0.0388	0.0345	+/−0.0388	0.100	pCi/g						
Cobalt−60	U	−0.00352	+/−0.0208	0.0347	+/−0.0208	0.100	pCi/g						
Curium−243	U	−0.0374	+/−0.0416	0.0724	+/−0.0416		pCi/g						
Europium−155	U	0.0209	+/−0.0462	0.0851	+/−0.0462	0.500	pCi/g						
Lead−212		0.534	+/−0.0599	0.0513	+/−0.0599	0.100	pCi/g						
Lead−214		0.449	+/−0.081	0.0665	+/−0.081	0.100	pCi/g						
Neptunium−236	U	0.0137	+/−0.0259	0.0481	+/−0.0259		pCi/g						
Neptunium−237	UI	0.245	+/−0.146	0.176	+/−0.146		pCi/g						
Neptunium−239	U	0.108	+/−0.111	0.197	+/−0.111	2.00	pCi/g						
Polonium−209	U	1.37	+/−4.51	7.72	+/−4.51		pCi/g						
Potassium−40		5.25	+/−0.699	0.305	+/−0.699	1.00	pCi/g						
Protactinium−233	U	−0.00769	+/−0.0331	0.0576	+/−0.0331		pCi/g						
Protactinium−234m	U	−1.69	+/−2.91	4.21	+/−2.91		pCi/g						
Radium−223	UI	0.218	+/−0.130	0.168	+/−0.130		pCi/g						
Rhodium−101	U	−0.000317	+/−0.0199	0.0303	+/−0.0199		pCi/g						
Thallium−208		0.196	+/−0.0409	0.0346	+/−0.0409	0.080	pCi/g						
Thorium−234		0.501	+/−0.293	0.360	+/−0.293	0.500	pCi/g						
Uranium−235	U	−0.0423	+/−0.108	0.158	+/−0.108	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2333−SD Project: SCAN00101
Sample ID: 198701026 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2334−SD
Sample ID: 198701027
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.10	+/−0.195	0.137	+/−0.195	0.800	pCi/g		MJH1	12/14/07	0638	708131	1
Americium−241	U	0.022	+/−0.0306	0.0524	+/−0.0306	0.200	pCi/g						
Americium−243	UI	0.201	+/−0.0308	0.0305	+/−0.0308		pCi/g						
Americium−246	U	0.0435	+/−0.097	0.156	+/−0.097		pCi/g						
Antimony−125	U	−0.00785	+/−0.0574	0.0991	+/−0.0574	0.200	pCi/g						
Bismuth−211	U	−0.332	+/−0.722	1.00	+/−0.722		pCi/g						
Bismuth−212		0.533	+/−0.243	0.299	+/−0.243	0.500	pCi/g						
Bismuth−214		0.780	+/−0.116	0.080	+/−0.116	0.200	pCi/g						
Californium−249	U	−0.00193	+/−0.025	0.0437	+/−0.025		pCi/g						
Cesium−137	U	0.0417	+/−0.0244	0.0421	+/−0.0244	0.100	pCi/g						
Cobalt−60	U	0.00762	+/−0.0262	0.046	+/−0.0262	0.100	pCi/g						
Curium−243	U	0.0593	+/−0.067	0.0834	+/−0.067		pCi/g						
Europium−155	U	0.0659	+/−0.0745	0.0963	+/−0.0745	0.500	pCi/g						
Lead−212		1.00	+/−0.103	0.0586	+/−0.103	0.100	pCi/g						
Lead−214		0.827	+/−0.0984	0.0717	+/−0.0984	0.100	pCi/g						
Neptunium−236	UI	0.0642	+/−0.0319	0.0548	+/−0.0319		pCi/g						
Neptunium−237	UI	0.614	+/−0.137	0.165	+/−0.137		pCi/g						
Neptunium−239	U	−0.0494	+/−0.137	0.233	+/−0.137	2.00	pCi/g						
Polonium−209	U	3.82	+/−4.84	7.68	+/−4.84		pCi/g						
Potassium−40		7.10	+/−0.877	0.340	+/−0.877	1.00	pCi/g						
Protactinium−233	U	0.0465	+/−0.037	0.0694	+/−0.037		pCi/g						
Protactinium−234m	U	2.20	+/−2.59	4.65	+/−2.59		pCi/g						
Radium−223	UI	0.478	+/−0.182	0.180	+/−0.182		pCi/g						
Rhodium−101	U	0.016	+/−0.0231	0.0383	+/−0.0231		pCi/g						
Thallium−208		0.343	+/−0.0521	0.0381	+/−0.0521	0.080	pCi/g						
Thorium−234		1.43	+/−0.332	0.384	+/−0.332	0.500	pCi/g						
Uranium−235	U	−0.0993	+/−0.123	0.205	+/−0.123	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2334−SD Project: SCAN00101
Sample ID: 198701027 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID:	SB−CZ−SS−2335−SD	Project:	SCAN00101
Sample ID:	198701028	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.15	+/−0.183	0.137	+/−0.183	0.800	pCi/g		MJH1	12/14/07	0641	708131	1
Americium−241	U	−0.0319	+/−0.0535	0.0822	+/−0.0535	0.200	pCi/g						
Americium−243	UI	0.161	+/−0.0313	0.0371	+/−0.0313		pCi/g						
Americium−246	U	0.0113	+/−0.0689	0.120	+/−0.0689		pCi/g						
Antimony−125	U	0.0273	+/−0.0528	0.0914	+/−0.0528	0.200	pCi/g						
Bismuth−211	U	−0.464	+/−0.576	0.898	+/−0.576		pCi/g						
Bismuth−212		0.732	+/−0.275	0.262	+/−0.275	0.500	pCi/g						
Bismuth−214		0.753	+/−0.104	0.0609	+/−0.104	0.200	pCi/g						
Californium−249	U	−0.0164	+/−0.0241	0.0369	+/−0.0241		pCi/g						
Cesium−137	U	0.0244	+/−0.0267	0.0353	+/−0.0267	0.100	pCi/g						
Cobalt−60	U	−0.0116	+/−0.0291	0.0391	+/−0.0291	0.100	pCi/g						
Curium−243	U	−0.0126	+/−0.048	0.0815	+/−0.048		pCi/g						
Europium−155	U	0.0613	+/−0.0553	0.0933	+/−0.0553	0.500	pCi/g						
Lead−212		1.08	+/−0.0915	0.0518	+/−0.0915	0.100	pCi/g						
Lead−214		0.755	+/−0.0909	0.064	+/−0.0909	0.100	pCi/g						
Neptunium−236	U	−0.00656	+/−0.0331	0.0503	+/−0.0331		pCi/g						
Neptunium−237	UI	0.610	+/−0.135	0.164	+/−0.135		pCi/g						
Neptunium−239	U	−0.077	+/−0.114	0.195	+/−0.114	2.00	pCi/g						
Polonium−209	U	0.159	+/−4.35	7.28	+/−4.35		pCi/g						
Potassium−40		5.52	+/−0.697	0.276	+/−0.697	1.00	pCi/g						
Protactinium−233	U	−0.0224	+/−0.0322	0.0531	+/−0.0322		pCi/g						
Protactinium−234m	U	1.59	+/−2.10	3.74	+/−2.10		pCi/g						
Radium−223	UI	0.322	+/−0.171	0.172	+/−0.171		pCi/g						
Rhodium−101	U	−0.00916	+/−0.0197	0.032	+/−0.0197		pCi/g						
Thallium−208		0.309	+/−0.0496	0.0341	+/−0.0496	0.080	pCi/g						
Thorium−234		1.23	+/−0.349	0.369	+/−0.349	0.500	pCi/g						
Uranium−235	U	0.00926	+/−0.105	0.174	+/−0.105	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2335−SD Project: SCAN00101
Sample ID: 198701028 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2336−ST
Sample ID: 198701029
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.795	+/−0.177	0.108	+/−0.177	0.800	pCi/g		MJH1	12/14/07	0643	708131	1
Americium−241	U	0.0227	+/−0.0839	0.133	+/−0.0839	0.200	pCi/g						
Americium−243	UI	0.122	+/−0.0334	0.0478	+/−0.0334		pCi/g						
Americium−246	U	0.0913	+/−0.0748	0.104	+/−0.0748		pCi/g						
Antimony−125	U	0.048	+/−0.0581	0.0911	+/−0.0581	0.200	pCi/g						
Bismuth−211	U	−0.132	+/−0.557	0.924	+/−0.557		pCi/g						
Bismuth−212		0.610	+/−0.216	0.235	+/−0.216	0.500	pCi/g						
Bismuth−214		0.720	+/−0.106	0.0611	+/−0.106	0.200	pCi/g						
Californium−249	U	0.0284	+/−0.0212	0.0386	+/−0.0212		pCi/g						
Cesium−137		0.234	+/−0.0452	0.035	+/−0.0452	0.100	pCi/g						
Cobalt−60	U	0.0305	+/−0.0223	0.0417	+/−0.0223	0.100	pCi/g						
Curium−243	U	0.0314	+/−0.0521	0.0911	+/−0.0521		pCi/g						
Europium−155	U	0.0209	+/−0.0543	0.101	+/−0.0543	0.500	pCi/g						
Lead−212		0.794	+/−0.0759	0.050	+/−0.0759	0.100	pCi/g						
Lead−214		0.876	+/−0.0998	0.0658	+/−0.0998	0.100	pCi/g						
Neptunium−236	U	0.0242	+/−0.0359	0.0565	+/−0.0359		pCi/g						
Neptunium−237	UI	0.516	+/−0.156	0.199	+/−0.156		pCi/g						
Neptunium−239	U	0.0191	+/−0.119	0.210	+/−0.119	2.00	pCi/g						
Polonium−209	U	0.943	+/−3.79	6.51	+/−3.79		pCi/g						
Potassium−40		4.97	+/−0.674	0.261	+/−0.674	1.00	pCi/g						
Protactinium−233	U	0.0255	+/−0.0353	0.0629	+/−0.0353		pCi/g						
Protactinium−234m	U	1.76	+/−2.78	4.43	+/−2.78		pCi/g						
Radium−223	UI	0.280	+/−0.190	0.162	+/−0.190		pCi/g						
Rhodium−101	U	0.00733	+/−0.0182	0.0335	+/−0.0182		pCi/g						
Thallium−208		0.233	+/−0.0477	0.0299	+/−0.0477	0.080	pCi/g						
Thorium−234		0.745	+/−0.384	0.431	+/−0.384	0.500	pCi/g						
Uranium−235	U	−0.0537	+/−0.111	0.187	+/−0.111	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2336−ST Project: SCAN00101
Sample ID: 198701029 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2337−ST
Sample ID: 198701030
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.696	+/−0.143	0.105	+/−0.143	0.800	pCi/g		MJH1	12/14/07	0731	708131	1
Americium−241	U	0.0595	+/−0.0638	0.115	+/−0.0638	0.200	pCi/g						
Americium−243	UI	0.0982	+/−0.0265	0.041	+/−0.0265		pCi/g						
Americium−246	U	0.056	+/−0.0567	0.107	+/−0.0567		pCi/g						
Antimony−125	U	0.0188	+/−0.0433	0.0784	+/−0.0433	0.200	pCi/g						
Bismuth−211	U	−0.283	+/−0.506	0.813	+/−0.506		pCi/g						
Bismuth−212		0.634	+/−0.225	0.209	+/−0.225	0.500	pCi/g						
Bismuth−214		0.527	+/−0.0855	0.0555	+/−0.0855	0.200	pCi/g						
Californium−249	U	0.0105	+/−0.018	0.033	+/−0.018		pCi/g						
Cesium−137		0.189	+/−0.0344	0.0303	+/−0.0344	0.100	pCi/g						
Cobalt−60	U	−0.00519	+/−0.0185	0.031	+/−0.0185	0.100	pCi/g						
Curium−243	U	−0.00457	+/−0.0446	0.0805	+/−0.0446		pCi/g						
Europium−155	U	0.0561	+/−0.0496	0.0929	+/−0.0496	0.500	pCi/g						
Lead−212		0.676	+/−0.068	0.0434	+/−0.068	0.100	pCi/g						
Lead−214		0.632	+/−0.0831	0.0552	+/−0.0831	0.100	pCi/g						
Neptunium−236	U	0.020	+/−0.0321	0.0505	+/−0.0321		pCi/g						
Neptunium−237	UI	0.268	+/−0.118	0.174	+/−0.118		pCi/g						
Neptunium−239	U	0.0187	+/−0.111	0.194	+/−0.111	2.00	pCi/g						
Polonium−209	U	0.583	+/−3.50	5.19	+/−3.50		pCi/g						
Potassium−40		4.24	+/−0.617	0.264	+/−0.617	1.00	pCi/g						
Protactinium−233	U	−0.014	+/−0.0305	0.0507	+/−0.0305		pCi/g						
Protactinium−234m	U	1.80	+/−3.56	3.12	+/−3.56		pCi/g						
Radium−223	UI	0.297	+/−0.132	0.150	+/−0.132		pCi/g						
Rhodium−101	U	0.0107	+/−0.0189	0.0299	+/−0.0189		pCi/g						
Thallium−208		0.202	+/−0.0381	0.0297	+/−0.0381	0.080	pCi/g						
Thorium−234		0.582	+/−0.397	0.397	+/−0.397	0.500	pCi/g						
Uranium−235	U	−0.00732	+/−0.102	0.172	+/−0.102	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2337−ST Project: SCAN00101
Sample ID: 198701030 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID:	SB−CZ−SS−2338−ST	Project:	SCAN00101
Sample ID:	198701031	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.641	+/−0.135	0.0846	+/−0.135	0.800	pCi/g		MJH1	12/14/07	0732	708131	1
Americium−241	U	0.00975	+/−0.0515	0.0815	+/−0.0515	0.200	pCi/g						
Americium−243	UI	0.105	+/−0.0268	0.0309	+/−0.0268		pCi/g						
Americium−246	U	0.0403	+/−0.0542	0.0975	+/−0.0542		pCi/g						
Antimony−125	U	−0.0387	+/−0.0426	0.068	+/−0.0426	0.200	pCi/g						
Bismuth−211	U	−0.263	+/−0.427	0.690	+/−0.427		pCi/g						
Bismuth−212		0.436	+/−0.170	0.172	+/−0.170	0.500	pCi/g						
Bismuth−214		0.516	+/−0.0731	0.050	+/−0.0731	0.200	pCi/g						
Californium−249	U	0.00953	+/−0.0201	0.0311	+/−0.0201		pCi/g						
Cesium−137		0.230	+/−0.0318	0.0232	+/−0.0318	0.100	pCi/g						
Cobalt−60	U	0.0047	+/−0.0161	0.0277	+/−0.0161	0.100	pCi/g						
Curium−243	U	−0.016	+/−0.037	0.067	+/−0.037		pCi/g						
Europium−155	U	0.0064	+/−0.0414	0.0766	+/−0.0414	0.500	pCi/g						
Lead−212		0.644	+/−0.062	0.0434	+/−0.062	0.100	pCi/g						
Lead−214		0.546	+/−0.0709	0.0489	+/−0.0709	0.100	pCi/g						
Neptunium−236	U	0.0194	+/−0.029	0.0445	+/−0.029		pCi/g						
Neptunium−237	UI	0.354	+/−0.121	0.144	+/−0.121		pCi/g						
Neptunium−239	U	0.0215	+/−0.098	0.175	+/−0.098	2.00	pCi/g						
Polonium−209	U	0.0493	+/−3.21	5.46	+/−3.21		pCi/g						
Potassium−40		3.89	+/−0.547	0.262	+/−0.547	1.00	pCi/g						
Protactinium−233	U	0.0133	+/−0.029	0.0514	+/−0.029		pCi/g						
Protactinium−234m	U	−0.0969	+/−1.98	3.15	+/−1.98		pCi/g						
Radium−223	UI	0.198	+/−0.113	0.129	+/−0.113		pCi/g						
Rhodium−101	U	−0.0145	+/−0.0162	0.0266	+/−0.0162		pCi/g						
Thallium−208		0.185	+/−0.0377	0.0226	+/−0.0377	0.080	pCi/g						
Thorium−234		0.609	+/−0.293	0.319	+/−0.293	0.500	pCi/g						
Uranium−235	U	−0.0193	+/−0.0954	0.162	+/−0.0954	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2338−ST Project: SCAN00101
Sample ID: 198701031 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2339−ST
Sample ID: 198701032
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.718	+/−0.164	0.120	+/−0.164	0.800	pCi/g		MJH1	12/14/07	0811	708131	1
Americium−241	U	0.0112	+/−0.0885	0.145	+/−0.0885	0.200	pCi/g						
Americium−243	UI	0.106	+/−0.038	0.0471	+/−0.038		pCi/g						
Americium−246	U	0.0409	+/−0.0707	0.128	+/−0.0707		pCi/g						
Antimony−125	U	0.025	+/−0.0533	0.093	+/−0.0533	0.200	pCi/g						
Bismuth−211	U	0.223	+/−0.703	1.14	+/−0.703		pCi/g						
Bismuth−212		0.682	+/−0.228	0.270	+/−0.228	0.500	pCi/g						
Bismuth−214		0.465	+/−0.102	0.0674	+/−0.102	0.200	pCi/g						
Californium−249	U	0.0173	+/−0.0232	0.0414	+/−0.0232		pCi/g						
Cesium−137		0.268	+/−0.0471	0.0373	+/−0.0471	0.100	pCi/g						
Cobalt−60	U	0.000979	+/−0.0244	0.0402	+/−0.0244	0.100	pCi/g						
Curium−243	U	0.0525	+/−0.0628	0.0864	+/−0.0628		pCi/g						
Europium−155	U	0.0583	+/−0.0698	0.104	+/−0.0698	0.500	pCi/g						
Lead−212		0.755	+/−0.0765	0.0541	+/−0.0765	0.100	pCi/g						
Lead−214		0.584	+/−0.101	0.0754	+/−0.101	0.100	pCi/g						
Neptunium−236	U	0.0289	+/−0.033	0.0578	+/−0.033		pCi/g						
Neptunium−237	U	0.154	+/−0.161	0.199	+/−0.161		pCi/g						
Neptunium−239	U	−0.00394	+/−0.125	0.223	+/−0.125	2.00	pCi/g						
Polonium−209	U	−1.43	+/−4.02	6.48	+/−4.02		pCi/g						
Potassium−40		4.99	+/−0.731	0.307	+/−0.731	1.00	pCi/g						
Protactinium−233	U	0.0222	+/−0.0449	0.0667	+/−0.0449		pCi/g						
Protactinium−234m	U	1.65	+/−3.06	4.36	+/−3.06		pCi/g						
Radium−223	UI	0.326	+/−0.170	0.180	+/−0.170		pCi/g						
Rhodium−101	U	0.0236	+/−0.0191	0.0357	+/−0.0191		pCi/g						
Thallium−208		0.212	+/−0.0437	0.0356	+/−0.0437	0.080	pCi/g						
Thorium−234		1.16	+/−0.436	0.395	+/−0.436	0.500	pCi/g						
Uranium−235	U	0.134	+/−0.110	0.197	+/−0.110	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

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GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2339−ST Project: SCAN00101
Sample ID: 198701032 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID:	SB−CZ−SS−2340−ST	Project:	SCAN00101
Sample ID:	198701033	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.999	+/−0.197	0.160	+/−0.197	0.800	pCi/g		MJH1	12/14/07	0819	708131	1
Americium−241	U	0.00122	+/−0.0315	0.0523	+/−0.0315	0.200	pCi/g						
Americium−243	UI	0.172	+/−0.027	0.030	+/−0.027		pCi/g						
Americium−246	U	0.00471	+/−0.0884	0.149	+/−0.0884		pCi/g						
Antimony−125	U	−0.00187	+/−0.0574	0.0991	+/−0.0574	0.200	pCi/g						
Bismuth−211	U	−0.855	+/−0.680	1.04	+/−0.680		pCi/g						
Bismuth−212		0.708	+/−0.244	0.312	+/−0.244	0.500	pCi/g						
Bismuth−214		0.742	+/−0.128	0.0734	+/−0.128	0.200	pCi/g						
Californium−249	U	0.000447	+/−0.0244	0.0426	+/−0.0244		pCi/g						
Cesium−137		0.0843	+/−0.0412	0.0455	+/−0.0412	0.100	pCi/g						
Cobalt−60	U	0.0145	+/−0.027	0.0474	+/−0.027	0.100	pCi/g						
Curium−243	U	0.0166	+/−0.0477	0.0809	+/−0.0477		pCi/g						
Europium−155	U	0.0335	+/−0.0537	0.0919	+/−0.0537	0.500	pCi/g						
Lead−212		0.957	+/−0.0985	0.0526	+/−0.0985	0.100	pCi/g						
Lead−214		0.801	+/−0.0928	0.0696	+/−0.0928	0.100	pCi/g						
Neptunium−236	U	0.0373	+/−0.0311	0.0522	+/−0.0311		pCi/g						
Neptunium−237	UI	0.436	+/−0.124	0.160	+/−0.124		pCi/g						
Neptunium−239	U	0.128	+/−0.151	0.204	+/−0.151	2.00	pCi/g						
Polonium−209	U	−4.93	+/−4.92	7.66	+/−4.92		pCi/g						
Potassium−40		6.67	+/−0.785	0.314	+/−0.785	1.00	pCi/g						
Protactinium−233	U	0.0215	+/−0.033	0.0595	+/−0.033		pCi/g						
Protactinium−234m	U	−2.68	+/−3.37	4.87	+/−3.37		pCi/g						
Radium−223	UI	0.214	+/−0.153	0.175	+/−0.153		pCi/g						
Rhodium−101	U	−0.00358	+/−0.0205	0.0326	+/−0.0205		pCi/g						
Thallium−208		0.319	+/−0.0516	0.0393	+/−0.0516	0.080	pCi/g						
Thorium−234		0.776	+/−0.357	0.371	+/−0.357	0.500	pCi/g						
Uranium−235	U	0.0724	+/−0.156	0.177	+/−0.156	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2340−ST Project: SCAN00101
Sample ID: 198701033 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2341−ST
Sample ID: 198701034
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time	Batch	Mtd
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid												
Actinium−228		0.776	+/−0.164	0.119	+/−0.164	0.800	pCi/g		MJH1	12/14/07 0833	708131	1
Americium−241	U	0.00813	+/−0.0764	0.107	+/−0.0764	0.200	pCi/g					
Americium−243	UI	0.126	+/−0.0417	0.0374	+/−0.0417		pCi/g					
Americium−246	U	0.0697	+/−0.0851	0.122	+/−0.0851		pCi/g					
Antimony−125	U	−0.0242	+/−0.0542	0.0887	+/−0.0542	0.200	pCi/g					
Bismuth−211	U	0.441	+/−0.555	1.00	+/−0.555		pCi/g					
Bismuth−212		0.501	+/−0.316	0.246	+/−0.316	0.500	pCi/g					
Bismuth−214		0.527	+/−0.0997	0.0604	+/−0.0997	0.200	pCi/g					
Californium−249	U	−0.0196	+/−0.0233	0.0374	+/−0.0233		pCi/g					
Cesium−137		0.273	+/−0.0473	0.036	+/−0.0473	0.100	pCi/g					
Cobalt−60	U	0.014	+/−0.0242	0.0405	+/−0.0242	0.100	pCi/g					
Curium−243	U	0.00279	+/−0.0519	0.0868	+/−0.0519		pCi/g					
Europium−155	U	−0.00595	+/−0.0567	0.0943	+/−0.0567	0.500	pCi/g					
Lead−212		0.711	+/−0.0765	0.0518	+/−0.0765	0.100	pCi/g					
Lead−214		0.556	+/−0.0868	0.0625	+/−0.0868	0.100	pCi/g					
Neptunium−236	U	−0.00127	+/−0.032	0.0515	+/−0.032		pCi/g					
Neptunium−237	UI	0.494	+/−0.152	0.174	+/−0.152		pCi/g					
Neptunium−239	U	−0.0693	+/−0.126	0.213	+/−0.126	2.00	pCi/g					
Polonium−209	U	3.62	+/−4.02	7.33	+/−4.02		pCi/g					
Potassium−40		4.24	+/−0.572	0.316	+/−0.572	1.00	pCi/g					
Protactinium−233	U	0.0346	+/−0.0391	0.0658	+/−0.0391		pCi/g					
Protactinium−234m	U	0.209	+/−2.69	4.21	+/−2.69		pCi/g					
Radium−223	UI	0.205	+/−0.170	0.168	+/−0.170		pCi/g					
Rhodium−101	U	0.016	+/−0.0189	0.0337	+/−0.0189		pCi/g					
Thallium−208		0.204	+/−0.0444	0.0333	+/−0.0444	0.080	pCi/g					
Thorium−234		1.11	+/−0.398	0.384	+/−0.398	0.500	pCi/g					
Uranium−235	UI	0.244	+/−0.164	0.176	+/−0.164	0.500	pCi/g					

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2341−ST Project: SCAN00101
Sample ID: 198701034 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
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J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2342−ST
Sample ID: 198701035
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.718	+/−0.143	0.107	+/−0.143	0.800	pCi/g		MJH1	12/14/07	0842	708131	1
Americium−241	U	0.0493	+/−0.0598	0.0947	+/−0.0598	0.200	pCi/g						
Americium−243	UI	0.126	+/−0.0372	0.0367	+/−0.0372		pCi/g						
Americium−246	U	−0.0288	+/−0.0577	0.0932	+/−0.0577		pCi/g						
Antimony−125	U	0.0341	+/−0.0436	0.079	+/−0.0436	0.200	pCi/g						
Bismuth−211	U	0.0179	+/−0.481	0.836	+/−0.481		pCi/g						
Bismuth−212		0.493	+/−0.241	0.210	+/−0.241	0.500	pCi/g						
Bismuth−214		0.581	+/−0.0738	0.0451	+/−0.0738	0.200	pCi/g						
Californium−249	U	0.00776	+/−0.0202	0.0316	+/−0.0202		pCi/g						
Cesium−137		0.184	+/−0.0352	0.0162	+/−0.0352	0.100	pCi/g						
Cobalt−60	U	0.0129	+/−0.0206	0.0365	+/−0.0206	0.100	pCi/g						
Curium−243	U	0.0656	+/−0.0459	0.0763	+/−0.0459		pCi/g						
Europium−155	U	0.073	+/−0.051	0.0827	+/−0.051	0.500	pCi/g						
Lead−212		0.671	+/−0.0598	0.0441	+/−0.0598	0.100	pCi/g						
Lead−214		0.644	+/−0.0742	0.0475	+/−0.0742	0.100	pCi/g						
Neptunium−236	U	0.0384	+/−0.0303	0.0487	+/−0.0303		pCi/g						
Neptunium−237	UI	0.421	+/−0.140	0.162	+/−0.140		pCi/g						
Neptunium−239	U	0.00538	+/−0.121	0.181	+/−0.121	2.00	pCi/g						
Polonium−209	U	0.862	+/−3.29	5.78	+/−3.29		pCi/g						
Potassium−40		5.47	+/−0.587	0.263	+/−0.587	1.00	pCi/g						
Protactinium−233	U	0.0139	+/−0.0283	0.0502	+/−0.0283		pCi/g						
Protactinium−234m	U	1.10	+/−3.45	3.52	+/−3.45		pCi/g						
Radium−223	UI	0.322	+/−0.121	0.137	+/−0.121		pCi/g						
Rhodium−101	U	−0.00966	+/−0.0173	0.0277	+/−0.0173		pCi/g						
Thallium−208		0.203	+/−0.0383	0.0303	+/−0.0383	0.080	pCi/g						
Thorium−234		1.04	+/−0.308	0.355	+/−0.308	0.500	pCi/g						
Uranium−235	U	0.102	+/−0.112	0.163	+/−0.112	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2342−ST Project: SCAN00101
Sample ID: 198701035 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2343−ST
Sample ID: 198701036
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.769	+/−0.202	0.149	+/−0.202	0.800	pCi/g		MJH1	12/14/07	0934	708131	1
Americium−241	U	0.0436	+/−0.0287	0.0472	+/−0.0287	0.200	pCi/g						
Americium−243	UI	0.167	+/−0.0304	0.0269	+/−0.0304		pCi/g						
Americium−246	U	0.0199	+/−0.101	0.173	+/−0.101		pCi/g						
Antimony−125	U	0.0155	+/−0.0617	0.107	+/−0.0617	0.200	pCi/g						
Bismuth−211	U	0.156	+/−0.898	1.35	+/−0.898		pCi/g						
Bismuth−212	UI	0.634	+/−0.329	0.307	+/−0.329	0.500	pCi/g						
Bismuth−214		0.715	+/−0.112	0.0819	+/−0.112	0.200	pCi/g						
Californium−249	U	0.0164	+/−0.0262	0.0463	+/−0.0262		pCi/g						
Cesium−137		0.108	+/−0.0511	0.0461	+/−0.0511	0.100	pCi/g						
Cobalt−60	U	0.0119	+/−0.0303	0.0527	+/−0.0303	0.100	pCi/g						
Curium−243	U	0.0117	+/−0.0468	0.071	+/−0.0468		pCi/g						
Europium−155	U	0.0145	+/−0.0546	0.0828	+/−0.0546	0.500	pCi/g						
Lead−212		0.736	+/−0.075	0.0527	+/−0.075	0.100	pCi/g						
Lead−214		0.613	+/−0.0979	0.0725	+/−0.0979	0.100	pCi/g						
Neptunium−236	U	0.040	+/−0.0398	0.0433	+/−0.0398		pCi/g						
Neptunium−237	UI	0.379	+/−0.107	0.155	+/−0.107		pCi/g						
Neptunium−239	U	−0.0519	+/−0.125	0.215	+/−0.125	2.00	pCi/g						
Polonium−209	U	−3.46	+/−5.44	8.71	+/−5.44		pCi/g						
Potassium−40		3.95	+/−0.859	0.465	+/−0.859	1.00	pCi/g						
Protactinium−233	U	0.0549	+/−0.0377	0.0677	+/−0.0377		pCi/g						
Protactinium−234m	U	2.61	+/−3.21	5.83	+/−3.21		pCi/g						
Radium−223	UI	0.260	+/−0.150	0.183	+/−0.150		pCi/g						
Rhodium−101	U	−0.00135	+/−0.0201	0.0329	+/−0.0201		pCi/g						
Thallium−208		0.225	+/−0.0523	0.0379	+/−0.0523	0.080	pCi/g						
Thorium−234		1.01	+/−0.274	0.342	+/−0.274	0.500	pCi/g						
Uranium−235	U	0.0165	+/−0.109	0.186	+/−0.109	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2343−ST Project: SCAN00101
Sample ID: 198701036 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2344−ST
Sample ID: 198701037
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.752	+/−0.139	0.0879	+/−0.139	0.800	pCi/g		MJH1	12/17/07	1103	708133	1
Americium−241	U	−0.0194	+/−0.0555	0.0746	+/−0.0555	0.200	pCi/g						
Americium−243	UI	0.133	+/−0.0258	0.030	+/−0.0258		pCi/g						
Americium−246	U	0.0184	+/−0.0529	0.0932	+/−0.0529		pCi/g						
Antimony−125	U	−0.000513	+/−0.038	0.0671	+/−0.038	0.200	pCi/g						
Bismuth−211	U	−0.185	+/−0.394	0.660	+/−0.394		pCi/g						
Bismuth−212		0.471	+/−0.203	0.178	+/−0.203	0.500	pCi/g						
Bismuth−214		0.730	+/−0.0944	0.0465	+/−0.0944	0.200	pCi/g						
Californium−249	U	0.00111	+/−0.0159	0.0285	+/−0.0159		pCi/g						
Cesium−137		0.214	+/−0.033	0.0223	+/−0.033	0.100	pCi/g						
Cobalt−60	U	−0.00372	+/−0.0166	0.0274	+/−0.0166	0.100	pCi/g						
Curium−243	UI	0.0915	+/−0.0529	0.0581	+/−0.0529		pCi/g						
Europium−155	UI	0.102	+/−0.0589	0.0623	+/−0.0589	0.500	pCi/g						
Lead−212		0.648	+/−0.059	0.0381	+/−0.059	0.100	pCi/g						
Lead−214		0.825	+/−0.0872	0.049	+/−0.0872	0.100	pCi/g						
Neptunium−236	U	0.0283	+/−0.0314	0.0312	+/−0.0314		pCi/g						
Neptunium−237	UI	0.357	+/−0.108	0.139	+/−0.108		pCi/g						
Neptunium−239	U	0.0873	+/−0.103	0.151	+/−0.103	2.00	pCi/g						
Polonium−209	U	−1.07	+/−2.78	4.66	+/−2.78		pCi/g						
Potassium−40		3.89	+/−0.498	0.280	+/−0.498	1.00	pCi/g						
Protactinium−233	U	0.0117	+/−0.0261	0.0452	+/−0.0261		pCi/g						
Protactinium−234m	UI	3.22	+/−3.09	2.72	+/−3.09		pCi/g						
Radium−223	UI	0.229	+/−0.107	0.119	+/−0.107		pCi/g						
Rhodium−101	U	0.00109	+/−0.0156	0.0255	+/−0.0156		pCi/g						
Thallium−208		0.209	+/−0.0321	0.0243	+/−0.0321	0.080	pCi/g						
Thorium−234		0.732	+/−0.263	0.311	+/−0.263	0.500	pCi/g						
Uranium−235	U	0.0426	+/−0.124	0.140	+/−0.124	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2344−ST Project: SCAN00101
Sample ID: 198701037 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2345−ST
Sample ID: 198701038
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.775	+/−0.198	0.115	+/−0.198	0.800	pCi/g		MJH1	12/17/07	1103	708133	1
Americium−241	U	−0.00744	+/−0.0978	0.145	+/−0.0978	0.200	pCi/g						
Americium−243	UI	0.135	+/−0.040	0.0494	+/−0.040		pCi/g						
Americium−246	U	−0.0286	+/−0.0785	0.109	+/−0.0785		pCi/g						
Antimony−125	U	0.0713	+/−0.062	0.109	+/−0.062	0.200	pCi/g						
Bismuth−211	U	−0.78	+/−0.598	0.858	+/−0.598		pCi/g						
Bismuth−212	UI	0.263	+/−0.259	0.261	+/−0.259	0.500	pCi/g						
Bismuth−214		0.622	+/−0.104	0.0652	+/−0.104	0.200	pCi/g						
Californium−249	U	0.0034	+/−0.0241	0.0401	+/−0.0241		pCi/g						
Cesium−137		0.323	+/−0.0496	0.0364	+/−0.0496	0.100	pCi/g						
Cobalt−60	U	0.00141	+/−0.0219	0.0375	+/−0.0219	0.100	pCi/g						
Curium−243	U	0.00711	+/−0.0581	0.0958	+/−0.0581		pCi/g						
Europium−155	U	0.025	+/−0.0613	0.110	+/−0.0613	0.500	pCi/g						
Lead−212		0.713	+/−0.0754	0.0566	+/−0.0754	0.100	pCi/g						
Lead−214		0.679	+/−0.103	0.0791	+/−0.103	0.100	pCi/g						
Neptunium−236	U	−0.0494	+/−0.0393	0.0579	+/−0.0393		pCi/g						
Neptunium−237	UI	0.296	+/−0.172	0.246	+/−0.172		pCi/g						
Neptunium−239	U	0.0199	+/−0.140	0.239	+/−0.140	2.00	pCi/g						
Polonium−209	U	2.07	+/−4.45	7.67	+/−4.45		pCi/g						
Potassium−40		5.35	+/−0.765	0.368	+/−0.765	1.00	pCi/g						
Protactinium−233	U	0.0128	+/−0.0399	0.0679	+/−0.0399		pCi/g						
Protactinium−234m	U	2.94	+/−3.19	5.17	+/−3.19		pCi/g						
Radium−223	UI	0.220	+/−0.167	0.186	+/−0.167		pCi/g						
Rhodium−101	U	0.00295	+/−0.0221	0.0352	+/−0.0221		pCi/g						
Thallium−208		0.221	+/−0.0454	0.0383	+/−0.0454	0.080	pCi/g						
Thorium−234		0.642	+/−0.462	0.405	+/−0.462	0.500	pCi/g						
Uranium−235	U	0.0775	+/−0.144	0.206	+/−0.144	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2345−ST Project: SCAN00101
Sample ID: 198701038 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2346−ST
Sample ID: 198701039
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.647	+/−0.134	0.0794	+/−0.134	0.800	pCi/g		MJH1	12/16/07	1647	708133	1
Americium−241	U	−0.0036	+/−0.0461	0.0641	+/−0.0461	0.200	pCi/g						
Americium−243	UI	0.121	+/−0.0269	0.025	+/−0.0269		pCi/g						
Americium−246	U	0.0187	+/−0.0479	0.0799	+/−0.0479		pCi/g						
Antimony−125	U	−0.00693	+/−0.0362	0.0576	+/−0.0362	0.200	pCi/g						
Bismuth−211	U	−0.296	+/−0.364	0.568	+/−0.364		pCi/g						
Bismuth−212		0.515	+/−0.157	0.158	+/−0.157	0.500	pCi/g						
Bismuth−214		0.248	+/−0.0601	0.0441	+/−0.0601	0.200	pCi/g						
Californium−249	U	0.00328	+/−0.0158	0.0256	+/−0.0158		pCi/g						
Cesium−137		0.131	+/−0.0245	0.0236	+/−0.0245	0.100	pCi/g						
Cobalt−60	U	−0.00226	+/−0.0138	0.022	+/−0.0138	0.100	pCi/g						
Curium−243	U	0.0487	+/−0.0376	0.0538	+/−0.0376		pCi/g						
Europium−155	U	0.0542	+/−0.0419	0.0584	+/−0.0419	0.500	pCi/g						
Lead−212		0.716	+/−0.063	0.0338	+/−0.063	0.100	pCi/g						
Lead−214	UI	0.333	+/−0.0559	0.0432	+/−0.0559	0.100	pCi/g						
Neptunium−236	UI	0.0328	+/−0.0291	0.0303	+/−0.0291		pCi/g						
Neptunium−237		0.457	+/−0.127	0.112	+/−0.127		pCi/g						
Neptunium−239	U	0.0298	+/−0.0831	0.137	+/−0.0831	2.00	pCi/g						
Polonium−209	U	0.412	+/−3.67	4.53	+/−3.67		pCi/g						
Potassium−40		0.861	+/−0.330	0.192	+/−0.330	1.00	pCi/g						
Protactinium−233	U	−0.00675	+/−0.0243	0.039	+/−0.0243		pCi/g						
Protactinium−234m	U	0.612	+/−3.06	2.54	+/−3.06		pCi/g						
Radium−223	UI	0.265	+/−0.122	0.112	+/−0.122		pCi/g						
Rhodium−101	U	−0.0129	+/−0.0172	0.0208	+/−0.0172		pCi/g						
Thallium−208		0.193	+/−0.0337	0.0208	+/−0.0337	0.080	pCi/g						
Thorium−234		1.04	+/−0.294	0.248	+/−0.294	0.500	pCi/g						
Uranium−235	U	0.0356	+/−0.105	0.115	+/−0.105	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2346−ST Project: SCAN00101
Sample ID: 198701039 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2347−ST
Sample ID: 198701040
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.717	+/−0.123	0.105	+/−0.123	0.800	pCi/g		MJH1	12/16/07	1647	708133	1
Americium−241	U	0.0245	+/−0.0206	0.0309	+/−0.0206	0.200	pCi/g						
Americium−243	UI	0.139	+/−0.0194	0.0175	+/−0.0194		pCi/g						
Americium−246	U	−0.0491	+/−0.0937	0.113	+/−0.0937		pCi/g						
Antimony−125	U	−0.0261	+/−0.0444	0.0716	+/−0.0444	0.200	pCi/g						
Bismuth−211	U	−0.557	+/−0.500	0.782	+/−0.500		pCi/g						
Bismuth−212		0.289	+/−0.260	0.210	+/−0.260	0.500	pCi/g						
Bismuth−214		0.474	+/−0.0814	0.0515	+/−0.0814	0.200	pCi/g						
Californium−249	U	0.004	+/−0.0183	0.0307	+/−0.0183		pCi/g						
Cesium−137		0.187	+/−0.0351	0.032	+/−0.0351	0.100	pCi/g						
Cobalt−60	U	0.00522	+/−0.0194	0.0326	+/−0.0194	0.100	pCi/g						
Curium−243	U	7.28E−05	+/−0.0344	0.0491	+/−0.0344		pCi/g						
Europium−155	U	0.0301	+/−0.0385	0.0536	+/−0.0385	0.500	pCi/g						
Lead−212		0.769	+/−0.0646	0.0359	+/−0.0646	0.100	pCi/g						
Lead−214		0.546	+/−0.0694	0.0481	+/−0.0694	0.100	pCi/g						
Neptunium−236	U	0.00254	+/−0.0196	0.0281	+/−0.0196		pCi/g						
Neptunium−237	UI	0.464	+/−0.0886	0.0879	+/−0.0886		pCi/g						
Neptunium−239	U	−0.0425	+/−0.0845	0.141	+/−0.0845	2.00	pCi/g						
Polonium−209	U	−1.18	+/−3.60	5.90	+/−3.60		pCi/g						
Potassium−40		3.43	+/−0.467	0.302	+/−0.467	1.00	pCi/g						
Protactinium−233	U	0.00528	+/−0.0268	0.0452	+/−0.0268		pCi/g						
Protactinium−234m	UI	4.38	+/−2.96	3.27	+/−2.96		pCi/g						
Radium−223	UI	0.235	+/−0.109	0.115	+/−0.109		pCi/g						
Rhodium−101	U	0.00864	+/−0.0129	0.0222	+/−0.0129		pCi/g						
Thallium−208		0.229	+/−0.0429	0.0271	+/−0.0429	0.080	pCi/g						
Thorium−234		1.10	+/−0.205	0.205	+/−0.205	0.500	pCi/g						
Uranium−235	U	0.111	+/−0.0736	0.123	+/−0.0736	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2347−ST Project: SCAN00101
Sample ID: 198701040 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID:	SB−CZ−SS−2348−ST	Project:	SCAN00101
Sample ID:	198701041	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228	UI	0.489	+/−0.203	0.340	+/−0.203	0.800	pCi/g		MJH1	12/17/07	1113	708133	1
Americium−241	U	−0.00767	+/−0.0367	0.0537	+/−0.0367	0.200	pCi/g						
Americium−243	UI	0.115	+/−0.0302	0.0301	+/−0.0302		pCi/g						
Americium−246	U	0.00415	+/−0.132	0.204	+/−0.132		pCi/g						
Antimony−125	U	−0.0206	+/−0.0782	0.128	+/−0.0782	0.200	pCi/g						
Bismuth−211	U	0.296	+/−0.864	1.52	+/−0.864		pCi/g						
Bismuth−212	U	0.0803	+/−0.277	0.470	+/−0.277	0.500	pCi/g						
Bismuth−214		0.442	+/−0.117	0.0913	+/−0.117	0.200	pCi/g						
Californium−249	U	0.0136	+/−0.0291	0.0507	+/−0.0291		pCi/g						
Cesium−137		0.273	+/−0.0609	0.0653	+/−0.0609	0.100	pCi/g						
Cobalt−60	U	0.0477	+/−0.0456	0.0766	+/−0.0456	0.100	pCi/g						
Curium−243	U	−0.043	+/−0.0496	0.0788	+/−0.0496		pCi/g						
Europium−155	U	0.0151	+/−0.0554	0.0935	+/−0.0554	0.500	pCi/g						
Lead−212		0.382	+/−0.0833	0.0692	+/−0.0833	0.100	pCi/g						
Lead−214		0.592	+/−0.109	0.0899	+/−0.109	0.100	pCi/g						
Neptunium−236	U	0.0159	+/−0.0333	0.0502	+/−0.0333		pCi/g						
Neptunium−237	UI	0.338	+/−0.132	0.147	+/−0.132		pCi/g						
Neptunium−239	U	0.0922	+/−0.151	0.267	+/−0.151	2.00	pCi/g						
Polonium−209	U	−0.886	+/−5.84	9.64	+/−5.84		pCi/g						
Potassium−40		4.30	+/−0.944	0.482	+/−0.944	1.00	pCi/g						
Protactinium−233	U	−0.0121	+/−0.0477	0.0795	+/−0.0477		pCi/g						
Protactinium−234m	U	0.702	+/−3.70	5.92	+/−3.70		pCi/g						
Radium−223	UI	0.211	+/−0.218	0.204	+/−0.218		pCi/g						
Rhodium−101	U	0.00848	+/−0.0229	0.0401	+/−0.0229		pCi/g						
Thallium−208		0.140	+/−0.0512	0.0494	+/−0.0512	0.080	pCi/g						
Thorium−234		0.741	+/−0.308	0.342	+/−0.308	0.500	pCi/g						
Uranium−235	U	−0.0576	+/−0.119	0.190	+/−0.119	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2348−ST Project: SCAN00101
Sample ID: 198701041 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2349−ST
Sample ID: 198701042
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.532	+/−0.209	0.157	+/−0.209	0.800	pCi/g		MJH1	12/17/07	1113	708133	1
Americium−241	U	0.042	+/−0.105	0.161	+/−0.105	0.200	pCi/g						
Americium−243	UI	0.106	+/−0.0381	0.0444	+/−0.0381		pCi/g						
Americium−246	U	0.031	+/−0.0929	0.142	+/−0.0929		pCi/g						
Antimony−125	U	−0.0171	+/−0.0645	0.106	+/−0.0645	0.200	pCi/g						
Bismuth−211	U	−0.356	+/−0.866	1.18	+/−0.866		pCi/g						
Bismuth−212	U	0.286	+/−0.269	0.339	+/−0.269	0.500	pCi/g						
Bismuth−214		0.469	+/−0.104	0.0851	+/−0.104	0.200	pCi/g						
Californium−249	U	0.0186	+/−0.0264	0.0463	+/−0.0264		pCi/g						
Cesium−137		0.158	+/−0.0565	0.0371	+/−0.0565	0.100	pCi/g						
Cobalt−60	U	−0.00225	+/−0.0213	0.0352	+/−0.0213	0.100	pCi/g						
Curium−243	U	0.0336	+/−0.0493	0.088	+/−0.0493		pCi/g						
Europium−155	U	0.023	+/−0.0562	0.0992	+/−0.0562	0.500	pCi/g						
Lead−212		0.456	+/−0.0681	0.0584	+/−0.0681	0.100	pCi/g						
Lead−214		0.542	+/−0.105	0.0736	+/−0.105	0.100	pCi/g						
Neptunium−236	U	0.00735	+/−0.0376	0.0573	+/−0.0376		pCi/g						
Neptunium−237	UI	0.515	+/−0.166	0.166	+/−0.166		pCi/g						
Neptunium−239	U	0.0679	+/−0.136	0.228	+/−0.136	2.00	pCi/g						
Polonium−209	U	1.47	+/−5.70	8.77	+/−5.70		pCi/g						
Potassium−40		4.08	+/−0.647	0.291	+/−0.647	1.00	pCi/g						
Protactinium−233	U	0.00396	+/−0.0394	0.0679	+/−0.0394		pCi/g						
Protactinium−234m	U	−2.2	+/−3.44	4.97	+/−3.44		pCi/g						
Radium−223	UI	0.190	+/−0.228	0.179	+/−0.228		pCi/g						
Rhodium−101	U	−0.0026	+/−0.0224	0.0342	+/−0.0224		pCi/g						
Thallium−208		0.126	+/−0.0491	0.0384	+/−0.0491	0.080	pCi/g						
Thorium−234		1.08	+/−0.435	0.394	+/−0.435	0.500	pCi/g						
Uranium−235	U	0.0715	+/−0.117	0.189	+/−0.117	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2349−ST Project: SCAN00101
Sample ID: 198701042 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2336−SD
Sample ID: 198701043
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.943	+/−0.210	0.146	+/−0.210	0.800	pCi/g		MJH1	12/17/07	1124	708133	1
Americium−241	U	−0.00708	+/−0.0347	0.058	+/−0.0347	0.200	pCi/g						
Americium−243	UI	0.168	+/−0.029	0.0336	+/−0.029		pCi/g						
Americium−246	U	0.0245	+/−0.0966	0.167	+/−0.0966		pCi/g						
Antimony−125	U	0.00876	+/−0.0589	0.104	+/−0.0589	0.200	pCi/g						
Bismuth−211	U	−0.173	+/−0.850	1.24	+/−0.850		pCi/g						
Bismuth−212		0.653	+/−0.314	0.341	+/−0.314	0.500	pCi/g						
Bismuth−214		0.860	+/−0.128	0.0803	+/−0.128	0.200	pCi/g						
Californium−249	U	0.00317	+/−0.0254	0.0451	+/−0.0254		pCi/g						
Cesium−137	U	0.00504	+/−0.0364	0.0532	+/−0.0364	0.100	pCi/g						
Cobalt−60	U	0.0204	+/−0.0293	0.0528	+/−0.0293	0.100	pCi/g						
Curium−243	U	0.0422	+/−0.0702	0.0875	+/−0.0702		pCi/g						
Europium−155	U	0.047	+/−0.0781	0.0956	+/−0.0781	0.500	pCi/g						
Lead−212		0.858	+/−0.0953	0.0574	+/−0.0953	0.100	pCi/g						
Lead−214		0.759	+/−0.113	0.0796	+/−0.113	0.100	pCi/g						
Neptunium−236	U	0.0255	+/−0.0339	0.0555	+/−0.0339		pCi/g						
Neptunium−237	UI	0.517	+/−0.142	0.169	+/−0.142		pCi/g						
Neptunium−239	U	−0.0249	+/−0.128	0.217	+/−0.128	2.00	pCi/g						
Polonium−209	U	2.78	+/−5.00	9.06	+/−5.00		pCi/g						
Potassium−40		5.02	+/−0.878	0.479	+/−0.878	1.00	pCi/g						
Protactinium−233	U	−0.0242	+/−0.045	0.068	+/−0.045		pCi/g						
Protactinium−234m	U	−0.0239	+/−3.57	5.25	+/−3.57		pCi/g						
Radium−223	UI	0.222	+/−0.191	0.184	+/−0.191		pCi/g						
Rhodium−101	U	−0.00276	+/−0.0223	0.0362	+/−0.0223		pCi/g						
Thallium−208		0.328	+/−0.0515	0.0377	+/−0.0515	0.080	pCi/g						
Thorium−234		0.870	+/−0.367	0.392	+/−0.367	0.500	pCi/g						
Uranium−235	U	0.0453	+/−0.186	0.204	+/−0.186	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2336−SD Project: SCAN00101
Sample ID: 198701043 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2337−SD
Sample ID: 198701044
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.551	+/−0.177	0.116	+/−0.177	0.800	pCi/g		MJH1	12/17/07	1202	708133	1
Americium−241	U	0.0168	+/−0.0952	0.158	+/−0.0952	0.200	pCi/g						
Americium−243	UI	0.163	+/−0.0421	0.0441	+/−0.0421		pCi/g						
Americium−246	U	−0.0418	+/−0.0655	0.105	+/−0.0655		pCi/g						
Antimony−125	U	0.0101	+/−0.048	0.0825	+/−0.048	0.200	pCi/g						
Bismuth−211	U	−0.0905	+/−0.539	0.892	+/−0.539		pCi/g						
Bismuth−212		0.420	+/−0.249	0.232	+/−0.249	0.500	pCi/g						
Bismuth−214		0.509	+/−0.094	0.0617	+/−0.094	0.200	pCi/g						
Californium−249	U	0.00306	+/−0.0229	0.0348	+/−0.0229		pCi/g						
Cesium−137		0.0511	+/−0.0248	0.0313	+/−0.0248	0.100	pCi/g						
Cobalt−60	U	0.000948	+/−0.022	0.0375	+/−0.022	0.100	pCi/g						
Curium−243	U	0.00336	+/−0.045	0.0797	+/−0.045		pCi/g						
Europium−155	U	−0.0201	+/−0.0511	0.0886	+/−0.0511	0.500	pCi/g						
Lead−212		0.684	+/−0.0689	0.0498	+/−0.0689	0.100	pCi/g						
Lead−214		0.617	+/−0.085	0.0636	+/−0.085	0.100	pCi/g						
Neptunium−236	U	−0.00733	+/−0.0336	0.0549	+/−0.0336		pCi/g						
Neptunium−237	UI	0.354	+/−0.152	0.191	+/−0.152		pCi/g						
Neptunium−239	U	0.0812	+/−0.117	0.201	+/−0.117	2.00	pCi/g						
Polonium−209	U	−4.38	+/−4.44	5.85	+/−4.44		pCi/g						
Potassium−40		4.86	+/−0.672	0.291	+/−0.672	1.00	pCi/g						
Protactinium−233	U	0.00566	+/−0.0337	0.0592	+/−0.0337		pCi/g						
Protactinium−234m	UI	3.98	+/−2.95	3.65	+/−2.95		pCi/g						
Radium−223	U	0.102	+/−0.147	0.161	+/−0.147		pCi/g						
Rhodium−101	U	0.00908	+/−0.0185	0.030	+/−0.0185		pCi/g						
Thallium−208		0.175	+/−0.0442	0.0305	+/−0.0442	0.080	pCi/g						
Thorium−234		0.883	+/−0.405	0.406	+/−0.405	0.500	pCi/g						
Uranium−235	U	0.102	+/−0.147	0.174	+/−0.147	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2337−SD Project: SCAN00101
Sample ID: 198701044 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2338−SD
Sample ID: 198701045
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.07	+/−0.203	0.121	+/−0.203	0.800	pCi/g		MJH1	12/17/07	1203	708133	1
Americium−241	U	0.0389	+/−0.0884	0.147	+/−0.0884	0.200	pCi/g						
Americium−243	UI	0.130	+/−0.0352	0.0462	+/−0.0352		pCi/g						
Americium−246	U	0.0221	+/−0.0722	0.128	+/−0.0722		pCi/g						
Antimony−125	U	−0.0107	+/−0.0522	0.0871	+/−0.0522	0.200	pCi/g						
Bismuth−211	U	−0.816	+/−0.739	0.920	+/−0.739		pCi/g						
Bismuth−212		0.559	+/−0.337	0.241	+/−0.337	0.500	pCi/g						
Bismuth−214		0.471	+/−0.096	0.0718	+/−0.096	0.200	pCi/g						
Californium−249	U	0.0128	+/−0.0229	0.0404	+/−0.0229		pCi/g						
Cesium−137	U	0.0208	+/−0.024	0.0354	+/−0.024	0.100	pCi/g						
Cobalt−60	U	−0.00802	+/−0.0225	0.0369	+/−0.0225	0.100	pCi/g						
Curium−243	U	0.00267	+/−0.052	0.0912	+/−0.052		pCi/g						
Europium−155	U	0.0255	+/−0.0583	0.104	+/−0.0583	0.500	pCi/g						
Lead−212		0.758	+/−0.0784	0.0573	+/−0.0784	0.100	pCi/g						
Lead−214		0.615	+/−0.0899	0.0693	+/−0.0899	0.100	pCi/g						
Neptunium−236	U	0.0393	+/−0.0441	0.0539	+/−0.0441		pCi/g						
Neptunium−237	UI	0.345	+/−0.155	0.213	+/−0.155		pCi/g						
Neptunium−239	U	0.0511	+/−0.121	0.219	+/−0.121	2.00	pCi/g						
Polonium−209	U	−1.85	+/−5.01	6.87	+/−5.01		pCi/g						
Potassium−40		4.89	+/−0.705	0.348	+/−0.705	1.00	pCi/g						
Protactinium−233	U	−0.00824	+/−0.0371	0.0638	+/−0.0371		pCi/g						
Protactinium−234m	U	2.54	+/−2.69	4.83	+/−2.69		pCi/g						
Radium−223	UI	0.216	+/−0.170	0.173	+/−0.170		pCi/g						
Rhodium−101	U	0.00135	+/−0.0212	0.0352	+/−0.0212		pCi/g						
Thallium−208		0.247	+/−0.0482	0.0343	+/−0.0482	0.080	pCi/g						
Thorium−234		1.08	+/−0.436	0.391	+/−0.436	0.500	pCi/g						
Uranium−235	U	0.0696	+/−0.182	0.184	+/−0.182	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2338−SD Project: SCAN00101
Sample ID: 198701045 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2339−SD
Sample ID: 198701046
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.773	+/−0.143	0.102	+/−0.143	0.800	pCi/g		MJH1	12/17/07	1203	708133	1
Americium−241	U	−0.0114	+/−0.0466	0.0739	+/−0.0466	0.200	pCi/g						
Americium−243	UI	0.119	+/−0.0271	0.0334	+/−0.0271		pCi/g						
Americium−246	U	0.0436	+/−0.0647	0.118	+/−0.0647		pCi/g						
Antimony−125	U	−0.0148	+/−0.045	0.0743	+/−0.045	0.200	pCi/g						
Bismuth−211	U	−0.167	+/−0.529	0.867	+/−0.529		pCi/g						
Bismuth−212		0.457	+/−0.219	0.215	+/−0.219	0.500	pCi/g						
Bismuth−214		0.517	+/−0.0908	0.0581	+/−0.0908	0.200	pCi/g						
Californium−249	U	−0.00459	+/−0.0198	0.0333	+/−0.0198		pCi/g						
Cesium−137		0.0949	+/−0.0295	0.0269	+/−0.0295	0.100	pCi/g						
Cobalt−60	U	0.00734	+/−0.0235	0.036	+/−0.0235	0.100	pCi/g						
Curium−243	U	0.0108	+/−0.0463	0.0726	+/−0.0463		pCi/g						
Europium−155	U	0.00487	+/−0.050	0.0833	+/−0.050	0.500	pCi/g						
Lead−212		0.742	+/−0.0719	0.0449	+/−0.0719	0.100	pCi/g						
Lead−214		0.592	+/−0.0914	0.0564	+/−0.0914	0.100	pCi/g						
Neptunium−236	U	0.0343	+/−0.034	0.0434	+/−0.034		pCi/g						
Neptunium−237	UI	0.252	+/−0.124	0.148	+/−0.124		pCi/g						
Neptunium−239	U	−0.063	+/−0.105	0.182	+/−0.105	2.00	pCi/g						
Polonium−209	U	−1.33	+/−4.20	6.59	+/−4.20		pCi/g						
Potassium−40		5.89	+/−0.685	0.275	+/−0.685	1.00	pCi/g						
Protactinium−233	U	0.0146	+/−0.0352	0.0551	+/−0.0352		pCi/g						
Protactinium−234m	U	−1.18	+/−2.63	3.69	+/−2.63		pCi/g						
Radium−223	UI	0.301	+/−0.129	0.145	+/−0.129		pCi/g						
Rhodium−101	U	0.0118	+/−0.017	0.0296	+/−0.017		pCi/g						
Thallium−208		0.194	+/−0.039	0.0285	+/−0.039	0.080	pCi/g						
Thorium−234		0.940	+/−0.352	0.323	+/−0.352	0.500	pCi/g						
Uranium−235	U	0.0607	+/−0.128	0.152	+/−0.128	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2339−SD Project: SCAN00101
Sample ID: 198701046 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2340−SD
Sample ID: 198701047
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		1.06	+/−0.179	0.102	+/−0.179	0.800	pCi/g		MJH1	12/17/07	1204	708133	1
Americium−241	U	0.0341	+/−0.0728	0.108	+/−0.0728	0.200	pCi/g						
Americium−243	UI	0.155	+/−0.0355	0.0413	+/−0.0355		pCi/g						
Americium−246	U	−0.0103	+/−0.0604	0.0993	+/−0.0604		pCi/g						
Antimony−125	U	0.00314	+/−0.0463	0.0774	+/−0.0463	0.200	pCi/g						
Bismuth−211	U	−0.381	+/−0.500	0.813	+/−0.500		pCi/g						
Bismuth−212		0.693	+/−0.200	0.211	+/−0.200	0.500	pCi/g						
Bismuth−214		0.575	+/−0.0865	0.0546	+/−0.0865	0.200	pCi/g						
Californium−249	U	0.00467	+/−0.0198	0.0336	+/−0.0198		pCi/g						
Cesium−137	U	−0.00566	+/−0.0202	0.0284	+/−0.0202	0.100	pCi/g						
Cobalt−60	U	−0.006	+/−0.0193	0.031	+/−0.0193	0.100	pCi/g						
Curium−243	UI	0.0827	+/−0.0554	0.0807	+/−0.0554		pCi/g						
Europium−155	UI	0.092	+/−0.0617	0.0918	+/−0.0617	0.500	pCi/g						
Lead−212		1.07	+/−0.0863	0.0485	+/−0.0863	0.100	pCi/g						
Lead−214		0.733	+/−0.0839	0.0553	+/−0.0839	0.100	pCi/g						
Neptunium−236	U	0.0402	+/−0.0326	0.0525	+/−0.0326		pCi/g						
Neptunium−237	UI	0.501	+/−0.141	0.173	+/−0.141		pCi/g						
Neptunium−239	U	−0.0823	+/−0.120	0.193	+/−0.120	2.00	pCi/g						
Polonium−209	U	2.54	+/−3.22	5.72	+/−3.22		pCi/g						
Potassium−40		6.32	+/−0.685	0.268	+/−0.685	1.00	pCi/g						
Protactinium−233	U	−0.00439	+/−0.0313	0.0531	+/−0.0313		pCi/g						
Protactinium−234m	U	0.956	+/−2.56	3.89	+/−2.56		pCi/g						
Radium−223	UI	0.161	+/−0.177	0.149	+/−0.177		pCi/g						
Rhodium−101	U	−0.00644	+/−0.0204	0.0313	+/−0.0204		pCi/g						
Thallium−208		0.311	+/−0.0426	0.0284	+/−0.0426	0.080	pCi/g						
Thorium−234		1.31	+/−0.418	0.380	+/−0.418	0.500	pCi/g						
Uranium−235	U	0.157	+/−0.146	0.171	+/−0.146	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2340−SD Project: SCAN00101
Sample ID: 198701047 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2341−SD
Sample ID: 198701048
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.726	+/−0.173	0.129	+/−0.173	0.800	pCi/g		MJH1	12/17/07	1204	708133	1
Americium−241	U	0.00932	+/−0.0724	0.107	+/−0.0724	0.200	pCi/g						
Americium−243	UI	0.167	+/−0.0487	0.0416	+/−0.0487		pCi/g						
Americium−246	U	0.069	+/−0.0725	0.133	+/−0.0725		pCi/g						
Antimony−125	U	−0.0236	+/−0.0559	0.0909	+/−0.0559	0.200	pCi/g						
Bismuth−211	U	0.226	+/−0.653	1.06	+/−0.653		pCi/g						
Bismuth−212		0.508	+/−0.227	0.275	+/−0.227	0.500	pCi/g						
Bismuth−214		0.501	+/−0.106	0.0661	+/−0.106	0.200	pCi/g						
Californium−249	U	0.0195	+/−0.0218	0.0385	+/−0.0218		pCi/g						
Cesium−137		0.088	+/−0.0313	0.0348	+/−0.0313	0.100	pCi/g						
Cobalt−60	U	−0.0117	+/−0.0475	0.0391	+/−0.0475	0.100	pCi/g						
Curium−243	U	−0.0587	+/−0.0512	0.0804	+/−0.0512		pCi/g						
Europium−155	U	0.0116	+/−0.0563	0.0938	+/−0.0563	0.500	pCi/g						
Lead−212		0.780	+/−0.0831	0.0542	+/−0.0831	0.100	pCi/g						
Lead−214		0.548	+/−0.0864	0.0679	+/−0.0864	0.100	pCi/g						
Neptunium−236	U	−0.0123	+/−0.0363	0.0513	+/−0.0363		pCi/g						
Neptunium−237	UI	0.383	+/−0.145	0.213	+/−0.145		pCi/g						
Neptunium−239	U	−0.0277	+/−0.127	0.215	+/−0.127	2.00	pCi/g						
Polonium−209	U	0.186	+/−4.13	7.01	+/−4.13		pCi/g						
Potassium−40		3.45	+/−0.609	0.300	+/−0.609	1.00	pCi/g						
Protactinium−233	U	−0.0199	+/−0.0364	0.0597	+/−0.0364		pCi/g						
Protactinium−234m	U	−0.434	+/−2.70	4.37	+/−2.70		pCi/g						
Radium−223	U	0.130	+/−0.136	0.173	+/−0.136		pCi/g						
Rhodium−101	U	−0.0203	+/−0.022	0.0317	+/−0.022		pCi/g						
Thallium−208		0.214	+/−0.0458	0.0322	+/−0.0458	0.080	pCi/g						
Thorium−234	U	0.312	+/−0.388	0.440	+/−0.388	0.500	pCi/g						
Uranium−235	U	0.0477	+/−0.123	0.193	+/−0.123	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2341−SD Project: SCAN00101
Sample ID: 198701048 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2342−SD
Sample ID: 198701049
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.764	+/−0.139	0.0943	+/−0.139	0.800	pCi/g		MJH1	12/17/07	1205	708133	1
Americium−241	U	0.0165	+/−0.058	0.0953	+/−0.058	0.200	pCi/g						
Americium−243	UI	0.132	+/−0.0384	0.0366	+/−0.0384		pCi/g						
Americium−246	U	0.0228	+/−0.0591	0.104	+/−0.0591		pCi/g						
Antimony−125	U	−0.0217	+/−0.0409	0.0693	+/−0.0409	0.200	pCi/g						
Bismuth−211	U	−0.193	+/−0.440	0.738	+/−0.440		pCi/g						
Bismuth−212		0.374	+/−0.197	0.196	+/−0.197	0.500	pCi/g						
Bismuth−214		0.530	+/−0.0826	0.0551	+/−0.0826	0.200	pCi/g						
Californium−249	U	0.0114	+/−0.0171	0.0311	+/−0.0171		pCi/g						
Cesium−137		0.050	+/−0.0216	0.0273	+/−0.0216	0.100	pCi/g						
Cobalt−60	U	0.0239	+/−0.0173	0.0318	+/−0.0173	0.100	pCi/g						
Curium−243	U	0.00166	+/−0.0472	0.0746	+/−0.0472		pCi/g						
Europium−155	U	0.0134	+/−0.046	0.0832	+/−0.046	0.500	pCi/g						
Lead−212		0.700	+/−0.0608	0.0456	+/−0.0608	0.100	pCi/g						
Lead−214		0.637	+/−0.0713	0.0544	+/−0.0713	0.100	pCi/g						
Neptunium−236	U	0.0307	+/−0.0336	0.0448	+/−0.0336		pCi/g						
Neptunium−237	UI	0.427	+/−0.124	0.164	+/−0.124		pCi/g						
Neptunium−239	U	−0.0733	+/−0.105	0.174	+/−0.105	2.00	pCi/g						
Polonium−209	U	−2.17	+/−3.78	5.24	+/−3.78		pCi/g						
Potassium−40		5.37	+/−0.602	0.235	+/−0.602	1.00	pCi/g						
Protactinium−233	U	−0.00831	+/−0.0269	0.0473	+/−0.0269		pCi/g						
Protactinium−234m	U	2.68	+/−1.83	3.16	+/−1.83		pCi/g						
Radium−223	UI	0.177	+/−0.140	0.140	+/−0.140		pCi/g						
Rhodium−101	U	−0.000574	+/−0.0164	0.0272	+/−0.0164		pCi/g						
Thallium−208		0.229	+/−0.0377	0.0282	+/−0.0377	0.080	pCi/g						
Thorium−234		0.950	+/−0.302	0.361	+/−0.302	0.500	pCi/g						
Uranium−235	U	0.110	+/−0.169	0.157	+/−0.169	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2342−SD Project: SCAN00101
Sample ID: 198701049 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2343−SD
Sample ID: 198701050
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.873	+/−0.188	0.108	+/−0.188	0.800	pCi/g		MJH1	12/17/07	1206	708133	1
Americium−241	U	−0.0261	+/−0.0831	0.127	+/−0.0831	0.200	pCi/g						
Americium−243	UI	0.147	+/−0.0423	0.0452	+/−0.0423		pCi/g						
Americium−246	UI	0.175	+/−0.158	0.111	+/−0.158		pCi/g						
Antimony−125	U	0.0745	+/−0.0854	0.0899	+/−0.0854	0.200	pCi/g						
Bismuth−211	U	−0.301	+/−0.607	0.962	+/−0.607		pCi/g						
Bismuth−212		0.877	+/−0.358	0.230	+/−0.358	0.500	pCi/g						
Bismuth−214		0.409	+/−0.0974	0.0654	+/−0.0974	0.200	pCi/g						
Californium−249	UI	0.0346	+/−0.0365	0.0344	+/−0.0365		pCi/g						
Cesium−137	U	0.00305	+/−0.022	0.0374	+/−0.022	0.100	pCi/g						
Cobalt−60	U	−0.0044	+/−0.0209	0.0347	+/−0.0209	0.100	pCi/g						
Curium−243	U	0.0728	+/−0.0492	0.0821	+/−0.0492		pCi/g						
Europium−155	U	0.081	+/−0.0548	0.0822	+/−0.0548	0.500	pCi/g						
Lead−212		0.750	+/−0.0756	0.0532	+/−0.0756	0.100	pCi/g						
Lead−214		0.585	+/−0.0845	0.0589	+/−0.0845	0.100	pCi/g						
Neptunium−236	U	0.054	+/−0.0332	0.0548	+/−0.0332		pCi/g						
Neptunium−237	UI	0.442	+/−0.165	0.182	+/−0.165		pCi/g						
Neptunium−239	U	−0.0247	+/−0.123	0.205	+/−0.123	2.00	pCi/g						
Polonium−209	U	−0.138	+/−3.93	6.47	+/−3.93		pCi/g						
Potassium−40		3.09	+/−0.522	0.287	+/−0.522	1.00	pCi/g						
Protactinium−233	U	−0.00294	+/−0.0404	0.0579	+/−0.0404		pCi/g						
Protactinium−234m	U	0.924	+/−3.95	3.28	+/−3.95		pCi/g						
Radium−223	UI	0.199	+/−0.150	0.160	+/−0.150		pCi/g						
Rhodium−101	U	0.00598	+/−0.0243	0.0296	+/−0.0243		pCi/g						
Thallium−208		0.238	+/−0.0487	0.0334	+/−0.0487	0.080	pCi/g						
Thorium−234		0.818	+/−0.382	0.395	+/−0.382	0.500	pCi/g						
Uranium−235	U	0.0603	+/−0.120	0.184	+/−0.120	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2343−SD Project: SCAN00101
Sample ID: 198701050 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID:	SB−CZ−SS−2344−SD	Project:	SCAN00101
Sample ID:	198701051	Client ID:	SCAN001
Matrix:	Soil		
Collect Date:	28−SEP−07		
Receive Date:	04−DEC−07		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.823	+/−0.144	0.0789	+/−0.144	0.800	pCi/g		MJH1	12/17/07	1207	708133	1
Americium−241	U	0.0408	+/−0.0508	0.0846	+/−0.0508	0.200	pCi/g						
Americium−243	UI	0.139	+/−0.0285	0.0329	+/−0.0285		pCi/g						
Americium−246	U	−0.00696	+/−0.0527	0.0879	+/−0.0527		pCi/g						
Antimony−125	U	0.0186	+/−0.0451	0.0701	+/−0.0451	0.200	pCi/g						
Bismuth−211	U	0.0491	+/−0.449	0.680	+/−0.449		pCi/g						
Bismuth−212		0.462	+/−0.177	0.176	+/−0.177	0.500	pCi/g						
Bismuth−214		0.671	+/−0.0835	0.0489	+/−0.0835	0.200	pCi/g						
Californium−249	U	0.00789	+/−0.0166	0.0296	+/−0.0166		pCi/g						
Cesium−137	UI	0.0276	+/−0.0272	0.0247	+/−0.0272	0.100	pCi/g						
Cobalt−60	U	−0.0054	+/−0.0172	0.0279	+/−0.0172	0.100	pCi/g						
Curium−243	U	0.0164	+/−0.0417	0.0707	+/−0.0417		pCi/g						
Europium−155	U	0.0425	+/−0.042	0.0745	+/−0.042	0.500	pCi/g						
Lead−212		0.737	+/−0.0645	0.0422	+/−0.0645	0.100	pCi/g						
Lead−214		0.768	+/−0.0838	0.0501	+/−0.0838	0.100	pCi/g						
Neptunium−236	U	0.00924	+/−0.0241	0.0431	+/−0.0241		pCi/g						
Neptunium−237	UI	0.362	+/−0.125	0.146	+/−0.125		pCi/g						
Neptunium−239	U	−0.0389	+/−0.0909	0.161	+/−0.0909	2.00	pCi/g						
Polonium−209	U	0.0158	+/−3.09	5.12	+/−3.09		pCi/g						
Potassium−40		4.80	+/−0.599	0.213	+/−0.599	1.00	pCi/g						
Protactinium−233	U	−0.0143	+/−0.0266	0.0457	+/−0.0266		pCi/g						
Protactinium−234m	U	0.189	+/−1.88	3.08	+/−1.88		pCi/g						
Radium−223	UI	0.283	+/−0.0963	0.136	+/−0.0963		pCi/g						
Rhodium−101	U	0.00769	+/−0.0167	0.0262	+/−0.0167		pCi/g						
Thallium−208		0.223	+/−0.0414	0.0227	+/−0.0414	0.080	pCi/g						
Thorium−234		0.811	+/−0.272	0.322	+/−0.272	0.500	pCi/g						
Uranium−235	U	0.103	+/−0.131	0.153	+/−0.131	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2344−SD Project: SCAN00101
Sample ID: 198701051 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2345−SD
Sample ID: 198701052
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.591	+/−0.178	0.131	+/−0.178	0.800	pCi/g		MJH1	12/17/07	1202	708133	1
Americium−241	U	0.061	+/−0.092	0.145	+/−0.092	0.200	pCi/g						
Americium−243	UI	0.152	+/−0.0472	0.0461	+/−0.0472		pCi/g						
Americium−246	U	0.0237	+/−0.0843	0.125	+/−0.0843		pCi/g						
Antimony−125	U	−0.0201	+/−0.0556	0.092	+/−0.0556	0.200	pCi/g						
Bismuth−211	U	−0.233	+/−0.557	0.912	+/−0.557		pCi/g						
Bismuth−212		0.556	+/−0.244	0.243	+/−0.244	0.500	pCi/g						
Bismuth−214		0.511	+/−0.0899	0.068	+/−0.0899	0.200	pCi/g						
Californium−249	U	0.00944	+/−0.0231	0.0402	+/−0.0231		pCi/g						
Cesium−137		0.0696	+/−0.0376	0.0281	+/−0.0376	0.100	pCi/g						
Cobalt−60	U	−0.004	+/−0.0225	0.0366	+/−0.0225	0.100	pCi/g						
Curium−243	U	0.000583	+/−0.0525	0.0949	+/−0.0525		pCi/g						
Europium−155	U	0.0757	+/−0.0575	0.108	+/−0.0575	0.500	pCi/g						
Lead−212		0.674	+/−0.0734	0.0569	+/−0.0734	0.100	pCi/g						
Lead−214		0.583	+/−0.0957	0.0625	+/−0.0957	0.100	pCi/g						
Neptunium−236	U	0.0294	+/−0.0361	0.0589	+/−0.0361		pCi/g						
Neptunium−237	UI	0.413	+/−0.169	0.200	+/−0.169		pCi/g						
Neptunium−239	U	0.00872	+/−0.129	0.226	+/−0.129	2.00	pCi/g						
Polonium−209	U	−1.45	+/−3.71	6.02	+/−3.71		pCi/g						
Potassium−40		3.52	+/−0.568	0.289	+/−0.568	1.00	pCi/g						
Protactinium−233	U	0.019	+/−0.0375	0.0659	+/−0.0375		pCi/g						
Protactinium−234m	U	1.84	+/−3.37	3.82	+/−3.37		pCi/g						
Radium−223	U	0.107	+/−0.175	0.175	+/−0.175		pCi/g						
Rhodium−101	U	−0.00609	+/−0.0236	0.0346	+/−0.0236		pCi/g						
Thallium−208		0.191	+/−0.0463	0.0325	+/−0.0463	0.080	pCi/g						
Thorium−234		0.746	+/−0.391	0.432	+/−0.391	0.500	pCi/g						
Uranium−235	U	0.157	+/−0.145	0.194	+/−0.145	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2345−SD Project: SCAN00101
Sample ID: 198701052 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2346−SD
Sample ID: 198701053
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.657	+/−0.135	0.0834	+/−0.135	0.800	pCi/g		MJH1	12/16/07	1648	708133	1
Americium−241	U	−0.00652	+/−0.0649	0.0767	+/−0.0649	0.200	pCi/g						
Americium−243	UI	0.131	+/−0.030	0.0273	+/−0.030		pCi/g						
Americium−246	U	−0.0421	+/−0.0502	0.0781	+/−0.0502		pCi/g						
Antimony−125	U	−0.0197	+/−0.0363	0.0568	+/−0.0363	0.200	pCi/g						
Bismuth−211	U	0.0719	+/−0.393	0.657	+/−0.393		pCi/g						
Bismuth−212		0.530	+/−0.193	0.169	+/−0.193	0.500	pCi/g						
Bismuth−214		0.230	+/−0.0685	0.046	+/−0.0685	0.200	pCi/g						
Californium−249	U	0.0115	+/−0.0156	0.0256	+/−0.0156		pCi/g						
Cesium−137	U	0.0174	+/−0.0218	0.0231	+/−0.0218	0.100	pCi/g						
Cobalt−60	U	0.0127	+/−0.0159	0.0233	+/−0.0159	0.100	pCi/g						
Curium−243	U	0.044	+/−0.0364	0.058	+/−0.0364		pCi/g						
Europium−155	U	0.049	+/−0.0405	0.0663	+/−0.0405	0.500	pCi/g						
Lead−212		0.652	+/−0.0614	0.0358	+/−0.0614	0.100	pCi/g						
Lead−214		0.336	+/−0.0539	0.0434	+/−0.0539	0.100	pCi/g						
Neptunium−236	U	−0.00507	+/−0.0292	0.0368	+/−0.0292		pCi/g						
Neptunium−237	UI	0.373	+/−0.107	0.133	+/−0.107		pCi/g						
Neptunium−239	U	−0.0468	+/−0.0919	0.142	+/−0.0919	2.00	pCi/g						
Polonium−209	U	−0.705	+/−2.77	4.44	+/−2.77		pCi/g						
Potassium−40		0.463	+/−0.288	0.217	+/−0.288	1.00	pCi/g						
Protactinium−233	U	0.00641	+/−0.0258	0.0422	+/−0.0258		pCi/g						
Protactinium−234m	UI	3.36	+/−3.06	2.45	+/−3.06		pCi/g						
Radium−223	U	0.0981	+/−0.142	0.111	+/−0.142		pCi/g						
Rhodium−101	U	−0.0144	+/−0.0208	0.023	+/−0.0208		pCi/g						
Thallium−208		0.161	+/−0.0308	0.0234	+/−0.0308	0.080	pCi/g						
Thorium−234		0.610	+/−0.374	0.284	+/−0.374	0.500	pCi/g						
Uranium−235	U	0.0969	+/−0.116	0.120	+/−0.116	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2346−SD Project: SCAN00101
Sample ID: 198701053 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2347−SD
Sample ID: 198701054
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.774	+/−0.194	0.139	+/−0.194	0.800	pCi/g		MJH1	12/17/07	1236	708133	1
Americium−241	U	−0.0948	+/−0.133	0.192	+/−0.133	0.200	pCi/g						
Americium−243	UI	0.123	+/−0.0496	0.057	+/−0.0496		pCi/g						
Americium−246	U	0.0217	+/−0.0721	0.125	+/−0.0721		pCi/g						
Antimony−125	U	0.030	+/−0.0551	0.0982	+/−0.0551	0.200	pCi/g						
Bismuth−211	U	0.174	+/−0.634	1.07	+/−0.634		pCi/g						
Bismuth−212		0.638	+/−0.294	0.271	+/−0.294	0.500	pCi/g						
Bismuth−214		0.422	+/−0.0961	0.0699	+/−0.0961	0.200	pCi/g						
Californium−249	U	−0.0139	+/−0.0242	0.0383	+/−0.0242		pCi/g						
Cesium−137		0.0858	+/−0.0389	0.0338	+/−0.0389	0.100	pCi/g						
Cobalt−60	U	0.00255	+/−0.0229	0.0387	+/−0.0229	0.100	pCi/g						
Curium−243	U	0.0273	+/−0.0598	0.101	+/−0.0598		pCi/g						
Europium−155	U	0.00194	+/−0.0667	0.111	+/−0.0667	0.500	pCi/g						
Lead−212		0.718	+/−0.0987	0.0577	+/−0.0987	0.100	pCi/g						
Lead−214		0.604	+/−0.101	0.0667	+/−0.101	0.100	pCi/g						
Neptunium−236	U	0.00869	+/−0.0412	0.0616	+/−0.0412		pCi/g						
Neptunium−237	UI	0.502	+/−0.177	0.220	+/−0.177		pCi/g						
Neptunium−239	U	0.0491	+/−0.126	0.219	+/−0.126	2.00	pCi/g						
Polonium−209	U	3.95	+/−5.22	5.68	+/−5.22		pCi/g						
Potassium−40		3.45	+/−0.567	0.286	+/−0.567	1.00	pCi/g						
Protactinium−233	U	0.0171	+/−0.036	0.0618	+/−0.036		pCi/g						
Protactinium−234m	UI	3.91	+/−3.24	3.72	+/−3.24		pCi/g						
Radium−223	UI	0.357	+/−0.164	0.178	+/−0.164		pCi/g						
Rhodium−101	U	0.00901	+/−0.0245	0.0345	+/−0.0245		pCi/g						
Thallium−208		0.246	+/−0.0452	0.0305	+/−0.0452	0.080	pCi/g						
Thorium−234		0.716	+/−0.421	0.463	+/−0.421	0.500	pCi/g						
Uranium−235	U	−0.0184	+/−0.133	0.205	+/−0.133	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2347−SD Project: SCAN00101
Sample ID: 198701054 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2348−SD
Sample ID: 198701055
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228		0.735	+/−0.213	0.169	+/−0.213	0.800	pCi/g		MJH1	12/17/07	1429	708133	1
Americium−241	U	0.0165	+/−0.037	0.0589	+/−0.037	0.200	pCi/g						
Americium−243	UI	0.157	+/−0.0381	0.0359	+/−0.0381		pCi/g						
Americium−246	U	−0.057	+/−0.0981	0.154	+/−0.0981		pCi/g						
Antimony−125	U	−0.000479	+/−0.0935	0.135	+/−0.0935	0.200	pCi/g						
Bismuth−211	U	0.398	+/−1.13	1.43	+/−1.13		pCi/g						
Bismuth−212	UI	0.394	+/−0.420	0.352	+/−0.420	0.500	pCi/g						
Bismuth−214	UI	0.445	+/−0.113	0.178	+/−0.113	0.200	pCi/g						
Californium−249	U	0.00683	+/−0.0309	0.0528	+/−0.0309		pCi/g						
Cesium−137	UI	0.0682	+/−0.0704	0.0496	+/−0.0704	0.100	pCi/g						
Cobalt−60	U	−0.005	+/−0.0327	0.0541	+/−0.0327	0.100	pCi/g						
Curium−243	U	0.0637	+/−0.0591	0.106	+/−0.0591		pCi/g						
Europium−155	U	0.0278	+/−0.0676	0.118	+/−0.0676	0.500	pCi/g						
Lead−212		0.543	+/−0.0822	0.0706	+/−0.0822	0.100	pCi/g						
Lead−214		0.481	+/−0.115	0.0921	+/−0.115	0.100	pCi/g						
Neptunium−236	U	0.0144	+/−0.0378	0.0614	+/−0.0378		pCi/g						
Neptunium−237	UI	0.452	+/−0.166	0.185	+/−0.166		pCi/g						
Neptunium−239	U	−0.265	+/−0.163	0.238	+/−0.163	2.00	pCi/g						
Polonium−209	U	−0.327	+/−6.17	10.2	+/−6.17		pCi/g						
Potassium−40		4.50	+/−0.896	0.428	+/−0.896	1.00	pCi/g						
Protactinium−233	U	−0.0107	+/−0.0467	0.0785	+/−0.0467		pCi/g						
Protactinium−234m	U	4.05	+/−3.47	6.44	+/−3.47		pCi/g						
Radium−223	U	0.0445	+/−0.143	0.251	+/−0.143		pCi/g						
Rhodium−101	U	−0.00433	+/−0.0294	0.0458	+/−0.0294		pCi/g						
Thallium−208		0.172	+/−0.0553	0.046	+/−0.0553	0.080	pCi/g						
Thorium−234		0.517	+/−0.375	0.431	+/−0.375	0.500	pCi/g						
Uranium−235	U	−0.106	+/−0.153	0.233	+/−0.153	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2348−SD Project: SCAN00101
Sample ID: 198701055 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117
Contact: Cindy White
Project: SC&A (GELP07−0971)

Report Date: December 18, 2007

Client Sample ID: SB−CZ−SS−2349−SD
Sample ID: 198701056
Matrix: Soil
Collect Date: 28−SEP−07
Receive Date: 04−DEC−07
Collector: Client

Project: SCAN00101
Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid													
Actinium−228	UI	0.606	+/−0.229	0.343	+/−0.229	0.800	pCi/g		MJH1	12/17/07	1429	708133	1
Americium−241	U	0.00111	+/−0.0399	0.0602	+/−0.0399	0.200	pCi/g						
Americium−243	UI	0.0842	+/−0.0289	0.0347	+/−0.0289		pCi/g						
Americium−246	U	−0.0672	+/−0.126	0.201	+/−0.126		pCi/g						
Antimony−125	U	0.0539	+/−0.0816	0.142	+/−0.0816	0.200	pCi/g						
Bismuth−211	U	1.01	+/−0.982	1.75	+/−0.982		pCi/g						
Bismuth−212	U	0.218	+/−0.325	0.490	+/−0.325	0.500	pCi/g						
Bismuth−214		0.398	+/−0.139	0.116	+/−0.139	0.200	pCi/g						
Californium−249	U	0.0378	+/−0.0485	0.0587	+/−0.0485		pCi/g						
Cesium−137	U	0.00641	+/−0.038	0.0615	+/−0.038	0.100	pCi/g						
Cobalt−60	U	0.0216	+/−0.0371	0.0651	+/−0.0371	0.100	pCi/g						
Curium−243	U	−0.0417	+/−0.0547	0.0919	+/−0.0547		pCi/g						
Europium−155	U	0.0213	+/−0.0613	0.108	+/−0.0613	0.500	pCi/g						
Lead−212		0.381	+/−0.077	0.073	+/−0.077	0.100	pCi/g						
Lead−214		0.410	+/−0.101	0.0982	+/−0.101	0.100	pCi/g						
Neptunium−236	U	−0.0317	+/−0.0408	0.0568	+/−0.0408		pCi/g						
Neptunium−237	UI	0.369	+/−0.153	0.178	+/−0.153		pCi/g						
Neptunium−239	U	0.175	+/−0.182	0.266	+/−0.182	2.00	pCi/g						
Polonium−209	U	4.10	+/−7.08	12.2	+/−7.08		pCi/g						
Potassium−40		3.10	+/−0.878	0.563	+/−0.878	1.00	pCi/g						
Protactinium−233	U	0.0265	+/−0.0511	0.0898	+/−0.0511		pCi/g						
Protactinium−234m	U	−3.38	+/−5.16	7.17	+/−5.16		pCi/g						
Radium−223	U	0.190	+/−0.181	0.239	+/−0.181		pCi/g						
Rhodium−101	U	−0.017	+/−0.0304	0.0418	+/−0.0304		pCi/g						
Thallium−208	UI	0.0951	+/−0.0677	0.0862	+/−0.0677	0.080	pCi/g						
Thorium−234	U	0.289	+/−0.477	0.437	+/−0.477	0.500	pCi/g						
Uranium−235	U	−0.0376	+/−0.159	0.254	+/−0.159	0.500	pCi/g						

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : SC&A
Address : 1000 Monticello Court

Montgomery, Alabama 36117 Report Date: December 18, 2007
Contact: Cindy White
Project: SC&A (GELP07−0971)

Client Sample ID: SB−CZ−SS−2349−SD Project: SCAN00101
Sample ID: 198701056 Client ID: SCAN001

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst Date	Time Batch	Mtd

** Analyte is a surrogate compound
< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol−condensation product
B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD Results are either below the MDC or tracer recovery is low
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D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
M M if above MDC and less than LLD
N/A RPD or %Recovery limits do not apply.
ND Analyte concentration is not detected above the detection limit
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy−−Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/−RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h Preparation or preservation holding time was exceeded
The above sample is reported on an "as received" basis.

QUALITY CONTROL DATA

QC Summary

Report Date: December 18, 2007

Client : **SC&A**
1000 Monticello Court

Montgomery, Alabama
Contact: **Cindy White**

Workorder: **198701**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708130										
QC1201473841 198689011 DUP										
Actinium-228		0.587		0.607	pCi/g	3		(0% - 100%)	MJH1	12/13/0712:53
	Uncert:	+/-0.220		+/-0.168						
	TPU:	+/-0.220		+/-0.168						
Americium-241	U	0.0171	U	0.0295	pCi/g	53		N/A		
	Uncert:	+/-0.0328		+/-0.0939						
	TPU:	+/-0.0328		+/-0.0939						
Americium-243	UI	0.101	UI	0.114	pCi/g	13		(0% - 100%)		
	Uncert:	+/-0.0264		+/-0.0375						
	TPU:	+/-0.0264		+/-0.0375						
Americium-246	U	0.0225	U	-0.0217	pCi/g	11800		N/A		
	Uncert:	+/-0.095		+/-0.0837						
	TPU:	+/-0.095		+/-0.0837						
Antimony-125	U	0.0177	U	-0.00702	pCi/g	462		N/A		
	Uncert:	+/-0.0633		+/-0.0607						
	TPU:	+/-0.0633		+/-0.0607						
Bismuth-211	U	-0.738	U	0.484	pCi/g	964		N/A		
	Uncert:	+/-0.806		+/-0.744						
	TPU:	+/-0.806		+/-0.744						
Bismuth-212	U	0.274	U	0.185	pCi/g	39		N/A		
	Uncert:	+/-0.229		+/-0.291						
	TPU:	+/-0.229		+/-0.291						
Bismuth-214		0.370		0.356	pCi/g	4		(0% - 100%)		
	Uncert:	+/-0.104		+/-0.101						
	TPU:	+/-0.104		+/-0.101						
Californium-249	U	-0.000185	U	0.00313	pCi/g	225		N/A		
	Uncert:	+/-0.026		+/-0.0264						
	TPU:	+/-0.026		+/-0.0264						
Cesium-137		0.111		0.119	pCi/g	6		(0% - 100%)		
	Uncert:	+/-0.0493		+/-0.0366						
	TPU:	+/-0.0493		+/-0.0366						
Cobalt-60	U	0.00709	UI	0.0702	pCi/g	163*		(0% - 100%)		
	Uncert:	+/-0.0312		+/-0.0204						
	TPU:	+/-0.0312		+/-0.0204						
Curium-243	U	-0.0542	U	0.000884	pCi/g	207		N/A		
	Uncert:	+/-0.0521		+/-0.0509						
	TPU:	+/-0.0521		+/-0.0509						
Europium-155	U	0.0436	U	0.039	pCi/g	11		N/A		
	Uncert:	+/-0.0586		+/-0.0621						
	TPU:	+/-0.0586		+/-0.0621						
Lead-212		0.543		0.546	pCi/g	1		(0% - 20%)		
	Uncert:	+/-0.0758		+/-0.0675						
	TPU:	+/-0.0758		+/-0.0675						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708130										
Lead-214		0.381		0.422	pCi/g	10		(0% - 20%)		
	Uncert:	+/-0.0756		+/-0.0878						
	TPU:	+/-0.0756		+/-0.0878						
Neptunium-236	U	0.0168	U	-0.016	pCi/g	8190		N/A		
	Uncert:	+/-0.0344		+/-0.0329						
	TPU:	+/-0.0344		+/-0.0329						
Neptunium-237	UI	0.346	UI	0.386	pCi/g	11		(0% - 100%)		
	Uncert:	+/-0.138		+/-0.170						
	TPU:	+/-0.138		+/-0.170						
Neptunium-239	U	0.113	U	-0.00772	pCi/g	229		N/A		
	Uncert:	+/-0.147		+/-0.129						
	TPU:	+/-0.147		+/-0.129						
Polonium-209	U	1.82	U	-0.32	pCi/g	285		N/A		
	Uncert:	+/-5.70		+/-5.04						
	TPU:	+/-5.70		+/-5.04						
Potassium-40		4.15		4.30	pCi/g	4		(0% - 20%)		
	Uncert:	+/-0.691		+/-0.711						
	TPU:	+/-0.691		+/-0.711						
Protactinium-233	U	-0.0155	U	0.0319	pCi/g	579		N/A		
	Uncert:	+/-0.0381		+/-0.0389						
	TPU:	+/-0.0381		+/-0.0389						
Protactinium-234m	U	-1.63	U	-2.26	pCi/g	32		N/A		
	Uncert:	+/-3.98		+/-3.46						
	TPU:	+/-3.98		+/-3.46						
Radium-223	UI	0.294	UI	0.206	pCi/g	35		(0% - 100%)		
	Uncert:	+/-0.144		+/-0.160						
	TPU:	+/-0.144		+/-0.160						
Rhodium-101	U	-0.0135	U	0.0207	pCi/g	946		N/A		
	Uncert:	+/-0.0217		+/-0.0232						
	TPU:	+/-0.0217		+/-0.0232						
Thallium-208		0.137		0.160	pCi/g	16		(0% - 100%)		
	Uncert:	+/-0.0421		+/-0.041						
	TPU:	+/-0.0421		+/-0.041						
Thorium-234		0.781	UI	0.628	pCi/g	22		(0% - 100%)		
	Uncert:	+/-0.377		+/-0.518						
	TPU:	+/-0.377		+/-0.518						
Uranium-235	U	0.0562	U	0.143	pCi/g	87		N/A		
	Uncert:	+/-0.142		+/-0.118						
	TPU:	+/-0.142		+/-0.118						
QC1201473842 LCS										
Actinium-228				1.08	pCi/g					12/14/0704:50
	Uncert:			+/-0.710						
	TPU:			+/-0.710						
Americium-241	16.0			15.0	pCi/g		94	(75%-125%)		
	Uncert:			+/-1.19						
	TPU:			+/-1.19						
Americium-243				0.577	pCi/g					
	Uncert:			+/-0.149						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708130										
	TPU:			+/-0.149						
Americium-246			U	-0.0231	pCi/g					
	Uncert:			+/-0.445						
	TPU:			+/-0.445						
Antimony-125			U	-0.11	pCi/g					
	Uncert:			+/-0.244						
	TPU:			+/-0.244						
Bismuth-211			U	1.48	pCi/g					
	Uncert:			+/-3.40						
	TPU:			+/-3.40						
Bismuth-212			U	0.623	pCi/g					
	Uncert:			+/-0.940						
	TPU:			+/-0.940						
Bismuth-214				1.00	pCi/g					
	Uncert:			+/-0.336						
	TPU:			+/-0.336						
Californium-249			U	-0.0218	pCi/g					
	Uncert:			+/-0.113						
	TPU:			+/-0.113						
Cesium-137	6.10			6.06	pCi/g		99	(75%-125%)		
	Uncert:			+/-0.586						
	TPU:			+/-0.586						
Cobalt-60	8.52			8.87	pCi/g		104	(75%-125%)		
	Uncert:			+/-0.632						
	TPU:			+/-0.632						
Curium-243			U	0.164	pCi/g					
	Uncert:			+/-0.187						
	TPU:			+/-0.187						
Europium-155			U	0.178	pCi/g					
	Uncert:			+/-0.203						
	TPU:			+/-0.203						
Lead-212				1.24	pCi/g					
	Uncert:			+/-0.199						
	TPU:			+/-0.199						
Lead-214				0.999	pCi/g					
	Uncert:			+/-0.259						
	TPU:			+/-0.259						
Neptunium-236			U	-0.053	pCi/g					
	Uncert:			+/-0.107						
	TPU:			+/-0.107						
Neptunium-237				35.9	pCi/g					
	Uncert:			+/-3.31						
	TPU:			+/-3.31						
Neptunium-239			U	-0.172	pCi/g					
	Uncert:			+/-0.507						
	TPU:			+/-0.507						
Polonium-209				261	pCi/g					
	Uncert:			+/-46.8						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708130										
	TPU:			+/-46.8						
Potassium-40				1.29	pCi/g					
	Uncert:			+/-0.818						
	TPU:			+/-0.818						
Protactinium-233			U	0.0429	pCi/g					
	Uncert:			+/-0.144						
	TPU:			+/-0.144						
Protactinium-234m			U	-2.14	pCi/g					
	Uncert:			+/-14.4						
	TPU:			+/-14.4						
Radium-223			U	0.588	pCi/g					
	Uncert:			+/-0.474						
	TPU:			+/-0.474						
Rhodium-101			U	0.026	pCi/g					
	Uncert:			+/-0.0687						
	TPU:			+/-0.0687						
Thallium-208				0.355	pCi/g					
	Uncert:			+/-0.149						
	TPU:			+/-0.149						
Thorium-234			U	0.969	pCi/g					
	Uncert:			+/-0.999						
	TPU:			+/-0.999						
Uranium-235			U	-0.0901	pCi/g					
	Uncert:			+/-0.369						
	TPU:			+/-0.369						
QC1201473840 MB										
Actinium-228			U	-0.00459	pCi/g					12/13/0712:52
	Uncert:			+/-0.0713						
	TPU:			+/-0.0713						
Americium-241			U	-0.0132	pCi/g					
	Uncert:			+/-0.014						
	TPU:			+/-0.014						
Americium-243			U	-0.00337	pCi/g					
	Uncert:			+/-0.00814						
	TPU:			+/-0.00814						
Americium-246			U	0.0289	pCi/g					
	Uncert:			+/-0.0657						
	TPU:			+/-0.0657						
Antimony-125			U	-0.00299	pCi/g					
	Uncert:			+/-0.0485						
	TPU:			+/-0.0485						
Bismuth-211			U	0.177	pCi/g					
	Uncert:			+/-0.537						
	TPU:			+/-0.537						
Bismuth-212			U	0.135	pCi/g					
	Uncert:			+/-0.135						
	TPU:			+/-0.135						
Bismuth-214			U	0.0623	pCi/g					

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 708130											
	Uncert:			+/-0.0814							
	TPU:			+/-0.0814							
Californium-249			U	0.00159	pCi/g						
	Uncert:			+/-0.0172							
	TPU:			+/-0.0172							
Cesium-137			U	-0.000644	pCi/g						
	Uncert:			+/-0.0181							
	TPU:			+/-0.0181							
Cobalt-60			U	0.0117	pCi/g						
	Uncert:			+/-0.0206							
	TPU:			+/-0.0206							
Curium-243			U	-0.00079	pCi/g						
	Uncert:			+/-0.0251							
	TPU:			+/-0.0251							
Europium-155			U	-0.0305	pCi/g						
	Uncert:			+/-0.0281							
	TPU:			+/-0.0281							
Lead-212			U	0.00536	pCi/g						
	Uncert:			+/-0.0424							
	TPU:			+/-0.0424							
Lead-214			U	0.0404	pCi/g						
	Uncert:			+/-0.0636							
	TPU:			+/-0.0636							
Neptunium-236			U	-0.0151	pCi/g						
	Uncert:			+/-0.0152							
	TPU:			+/-0.0152							
Neptunium-237			U	-0.0258	pCi/g						
	Uncert:			+/-0.0446							
	TPU:			+/-0.0446							
Neptunium-239			U	-0.00126	pCi/g						
	Uncert:			+/-0.0866							
	TPU:			+/-0.0866							
Polonium-209			U	1.37	pCi/g						
	Uncert:			+/-3.99							
	TPU:			+/-3.99							
Potassium-40			U	-0.151	pCi/g						
	Uncert:			+/-0.288							
	TPU:			+/-0.288							
Protactinium-233			U	-0.000221	pCi/g						
	Uncert:			+/-0.0277							
	TPU:			+/-0.0277							
Protactinium-234m			U	-2.28	pCi/g						
	Uncert:			+/-2.42							
	TPU:			+/-2.42							
Radium-223			U	0.075	pCi/g						
	Uncert:			+/-0.081							
	TPU:			+/-0.081							
Rhodium-101			U	-0.0033	pCi/g						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708130										
	Uncert:			+/-0.015						
	TPU:			+/-0.015						
Thallium-208			U	-0.00571	pCi/g					
	Uncert:			+/-0.0208						
	TPU:			+/-0.0208						
Thorium-234			U	-0.13	pCi/g					
	Uncert:			+/-0.125						
	TPU:			+/-0.125						
Uranium-235			U	-0.0208	pCi/g					
	Uncert:			+/-0.0649						
	TPU:			+/-0.0649						
Batch 708131										
QC1201473844 198701017 DUP										
Actinium-228		1.08		0.991	pCi/g	9		(0% - 20%)	MJH1	12/14/0710:21
	Uncert:	+/-0.212		+/-0.174						
	TPU:	+/-0.212		+/-0.174						
Americium-241	U	0.0177	U	0.00827	pCi/g	73		N/A		
	Uncert:	+/-0.0298		+/-0.0873						
	TPU:	+/-0.0298		+/-0.0873						
Americium-243	UI	0.159	UI	0.142	pCi/g	11		(0% - 100%)		
	Uncert:	+/-0.0293		+/-0.036						
	TPU:	+/-0.0293		+/-0.036						
Americium-246	U	-0.0244	U	-0.0306	pCi/g	23		N/A		
	Uncert:	+/-0.0831		+/-0.0708						
	TPU:	+/-0.0831		+/-0.0708						
Antimony-125	U	0.00226	U	-0.0357	pCi/g	227		N/A		
	Uncert:	+/-0.0603		+/-0.0502						
	TPU:	+/-0.0603		+/-0.0502						
Bismuth-211	U	-0.217	U	0.238	pCi/g	4500		N/A		
	Uncert:	+/-0.738		+/-0.562						
	TPU:	+/-0.738		+/-0.562						
Bismuth-212		0.962		0.781	pCi/g	21		(0% - 100%)		
	Uncert:	+/-0.308		+/-0.237						
	TPU:	+/-0.308		+/-0.237						
Bismuth-214		0.721		0.632	pCi/g	13		(0% - 20%)		
	Uncert:	+/-0.108		+/-0.0833						
	TPU:	+/-0.108		+/-0.0833						
Californium-249	U	0.0143	U	-0.0082	pCi/g	739		N/A		
	Uncert:	+/-0.0246		+/-0.019						
	TPU:	+/-0.0246		+/-0.019						
Cesium-137	U	0.0388	U	0.0284	pCi/g	31		N/A		
	Uncert:	+/-0.0338		+/-0.0249						
	TPU:	+/-0.0338		+/-0.0249						
Cobalt-60	U	0.00216	U	0.0101	pCi/g	129		N/A		
	Uncert:	+/-0.0243		+/-0.0205						
	TPU:	+/-0.0243		+/-0.0205						
Curium-243	U	0.0576	U	-0.0283	pCi/g	585		N/A		
	Uncert:	+/-0.0664		+/-0.0557						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708131										
	TPU:	+/-0.0664		+/-0.0557						
Europium-155	U	0.064	U	0.0741	pCi/g	15		N/A		
	Uncert:	+/-0.0738		+/-0.085						
	TPU:	+/-0.0738		+/-0.085						
Lead-212		1.01		0.886	pCi/g	13		(0% - 20%)		
	Uncert:	+/-0.105		+/-0.0782						
	TPU:	+/-0.105		+/-0.0782						
Lead-214		0.830		0.648	pCi/g	25*		(0% - 20%)		
	Uncert:	+/-0.104		+/-0.0814						
	TPU:	+/-0.104		+/-0.0814						
Neptunium-236	U	0.0487	U	0.012	pCi/g	121		N/A		
	Uncert:	+/-0.0386		+/-0.0424						
	TPU:	+/-0.0386		+/-0.0424						
Neptunium-237	UI	0.440	UI	0.418	pCi/g	5		(0% - 100%)		
	Uncert:	+/-0.123		+/-0.162						
	TPU:	+/-0.123		+/-0.162						
Neptunium-239	U	-0.0324	U	-0.0283	pCi/g	14		N/A		
	Uncert:	+/-0.154		+/-0.128						
	TPU:	+/-0.154		+/-0.128						
Polonium-209	U	0.456	U	2.27	pCi/g	133		N/A		
	Uncert:	+/-4.72		+/-3.85						
	TPU:	+/-4.72		+/-3.85						
Potassium-40		7.78		7.76	pCi/g	0		(0% - 20%)		
	Uncert:	+/-1.01		+/-0.818						
	TPU:	+/-1.01		+/-0.818						
Protactinium-233	U	0.0162	U	0.00929	pCi/g	54		N/A		
	Uncert:	+/-0.0373		+/-0.0306						
	TPU:	+/-0.0373		+/-0.0306						
Protactinium-234m	U	2.45	U	-0.651	pCi/g	345		N/A		
	Uncert:	+/-2.89		+/-2.64						
	TPU:	+/-2.89		+/-2.64						
Radium-223	UI	0.319	UI	0.275	pCi/g	15		(0% - 100%)		
	Uncert:	+/-0.174		+/-0.135						
	TPU:	+/-0.174		+/-0.135						
Rhodium-101	U	0.0101	U	-0.0119	pCi/g	2500		N/A		
	Uncert:	+/-0.0231		+/-0.0175						
	TPU:	+/-0.0231		+/-0.0175						
Thallium-208		0.310		0.263	pCi/g	17		(0% - 20%)		
	Uncert:	+/-0.0538		+/-0.0412						
	TPU:	+/-0.0538		+/-0.0412						
Thorium-234		1.58		1.03	pCi/g	42		(0% - 100%)		
	Uncert:	+/-0.397		+/-0.399						
	TPU:	+/-0.397		+/-0.399						
Uranium-235	U	-0.00764	UI	0.179	pCi/g	218*		(0% - 100%)		
	Uncert:	+/-0.121		+/-0.148						
	TPU:	+/-0.121		+/-0.148						
QC1201473845 LCS										
Actinium-228			U	0.792	pCi/g					12/14/0710:22

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708131										
	Uncert:			+/-0.789						
	TPU:			+/-0.789						
Americium-241	16.0			13.1	pCi/g		82	(75%-125%)		
	Uncert:			+/-1.37						
	TPU:			+/-1.37						
Americium-243			U	0.163	pCi/g					
	Uncert:			+/-0.137						
	TPU:			+/-0.137						
Americium-246			U	-0.0941	pCi/g					
	Uncert:			+/-0.410						
	TPU:			+/-0.410						
Antimony-125			U	-0.0431	pCi/g					
	Uncert:			+/-0.214						
	TPU:			+/-0.214						
Bismuth-211			U	-0.455	pCi/g					
	Uncert:			+/-2.93						
	TPU:			+/-2.93						
Bismuth-212			U	1.04	pCi/g					
	Uncert:			+/-0.703						
	TPU:			+/-0.703						
Bismuth-214				0.617	pCi/g					
	Uncert:			+/-0.248						
	TPU:			+/-0.248						
Californium-249			U	-0.000917	pCi/g					
	Uncert:			+/-0.115						
	TPU:			+/-0.115						
Cesium-137	6.10			5.93	pCi/g		97	(75%-125%)		
	Uncert:			+/-0.492						
	TPU:			+/-0.492						
Cobalt-60	8.52			8.20	pCi/g		96	(75%-125%)		
	Uncert:			+/-0.700						
	TPU:			+/-0.700						
Curium-243			U	0.135	pCi/g					
	Uncert:			+/-0.198						
	TPU:			+/-0.198						
Europium-155			U	-0.00533	pCi/g					
	Uncert:			+/-0.213						
	TPU:			+/-0.213						
Lead-212				1.00	pCi/g					
	Uncert:			+/-0.181						
	TPU:			+/-0.181						
Lead-214				0.769	pCi/g					
	Uncert:			+/-0.261						
	TPU:			+/-0.261						
Neptunium-236			U	-0.0275	pCi/g					
	Uncert:			+/-0.139						
	TPU:			+/-0.139						
Neptunium-237				30.5	pCi/g					

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708131										
	Uncert:			+/-2.88						
	TPU:			+/-2.88						
Neptunium-239			U	-0.13	pCi/g					
	Uncert:			+/-0.458						
	TPU:			+/-0.458						
Polonium-209				242	pCi/g					
	Uncert:			+/-46.8						
	TPU:			+/-46.8						
Potassium-40			U	0.751	pCi/g					
	Uncert:			+/-1.02						
	TPU:			+/-1.02						
Protactinium-233			U	-0.0306	pCi/g					
	Uncert:			+/-0.138						
	TPU:			+/-0.138						
Protactinium-234m			U	9.16	pCi/g					
	Uncert:			+/-13.3						
	TPU:			+/-13.3						
Radium-223			U	0.293	pCi/g					
	Uncert:			+/-0.493						
	TPU:			+/-0.493						
Rhodium-101			U	0.0136	pCi/g					
	Uncert:			+/-0.0611						
	TPU:			+/-0.0611						
Thallium-208				0.371	pCi/g					
	Uncert:			+/-0.126						
	TPU:			+/-0.126						
Thorium-234			U	0.671	pCi/g					
	Uncert:			+/-1.25						
	TPU:			+/-1.25						
Uranium-235			U	0.0542	pCi/g					
	Uncert:			+/-0.377						
	TPU:			+/-0.377						
QC1201473843 MB										
Actinium-228			U	0.00939	pCi/g					12/14/0710:21
	Uncert:			+/-0.058						
	TPU:			+/-0.058						
Americium-241			U	-0.0277	pCi/g					
	Uncert:			+/-0.0475						
	TPU:			+/-0.0475						
Americium-243			U	0.00491	pCi/g					
	Uncert:			+/-0.0155						
	TPU:			+/-0.0155						
Americium-246			U	0.0124	pCi/g					
	Uncert:			+/-0.0475						
	TPU:			+/-0.0475						
Antimony-125			U	0.0547	pCi/g					
	Uncert:			+/-0.0363						
	TPU:			+/-0.0363						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 708131											
Bismuth-211			U	-0.0181	pCi/g						
	Uncert:			+/-0.378							
	TPU:			+/-0.378							
Bismuth-212			U	0.0429	pCi/g						
	Uncert:			+/-0.096							
	TPU:			+/-0.096							
Bismuth-214			U	0.0147	pCi/g						
	Uncert:			+/-0.0494							
	TPU:			+/-0.0494							
Californium-249			U	-0.000209	pCi/g						
	Uncert:			+/-0.0149							
	TPU:			+/-0.0149							
Cesium-137			U	-0.0149	pCi/g						
	Uncert:			+/-0.0175							
	TPU:			+/-0.0175							
Cobalt-60			U	0.00734	pCi/g						
	Uncert:			+/-0.0127							
	TPU:			+/-0.0127							
Curium-243			U	0.000106	pCi/g						
	Uncert:			+/-0.0287							
	TPU:			+/-0.0287							
Europium-155			U	-0.00879	pCi/g						
	Uncert:			+/-0.0321							
	TPU:			+/-0.0321							
Lead-212			U	-0.00902	pCi/g						
	Uncert:			+/-0.0267							
	TPU:			+/-0.0267							
Lead-214			U	-0.0234	pCi/g						
	Uncert:			+/-0.031							
	TPU:			+/-0.031							
Neptunium-236			U	-0.00193	pCi/g						
	Uncert:			+/-0.0208							
	TPU:			+/-0.0208							
Neptunium-237			U	-0.00647	pCi/g						
	Uncert:			+/-0.0776							
	TPU:			+/-0.0776							
Neptunium-239			U	-0.0123	pCi/g						
	Uncert:			+/-0.075							
	TPU:			+/-0.075							
Polonium-209			U	0.263	pCi/g						
	Uncert:			+/-2.78							
	TPU:			+/-2.78							
Potassium-40			U	-0.104	pCi/g						
	Uncert:			+/-0.198							
	TPU:			+/-0.198							
Protactinium-233			U	0.0279	pCi/g						
	Uncert:			+/-0.0271							
	TPU:			+/-0.0271							

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708131										
Protactinium-234m			U	2.55	pCi/g					
	Uncert:			+/-1.58						
	TPU:			+/-1.58						
Radium-223			U	0.016	pCi/g					
	Uncert:			+/-0.0626						
	TPU:			+/-0.0626						
Rhodium-101			U	-0.0093	pCi/g					
	Uncert:			+/-0.0135						
	TPU:			+/-0.0135						
Thallium-208			U	-0.00657	pCi/g					
	Uncert:			+/-0.017						
	TPU:			+/-0.017						
Thorium-234			U	0.0173	pCi/g					
	Uncert:			+/-0.260						
	TPU:			+/-0.260						
Uranium-235			U	0.0341	pCi/g					
	Uncert:			+/-0.0673						
	TPU:			+/-0.0673						
Batch 708133										
QC1201473847 198701037 DUP										
Actinium-228		0.752		0.681	pCi/g	10		(0% - 100%)	MJH1	12/17/0714:31
	Uncert:	+/-0.139		+/-0.180						
	TPU:	+/-0.139		+/-0.180						
Americium-241	U	-0.0194	U	0.0236	pCi/g	2090		N/A		
	Uncert:	+/-0.0555		+/-0.0273						
	TPU:	+/-0.0555		+/-0.0273						
Americium-243	UI	0.133	UI	0.133	pCi/g	0		(0% - 100%)		
	Uncert:	+/-0.0258		+/-0.0305						
	TPU:	+/-0.0258		+/-0.0305						
Americium-246	U	0.0184	U	0.0672	pCi/g	114		N/A		
	Uncert:	+/-0.0529		+/-0.130						
	TPU:	+/-0.0529		+/-0.130						
Antimony-125	U	-0.000513	U	0.00811	pCi/g	227		N/A		
	Uncert:	+/-0.038		+/-0.0651						
	TPU:	+/-0.038		+/-0.0651						
Bismuth-211	U	-0.185	U	-0.26	pCi/g	34		N/A		
	Uncert:	+/-0.394		+/-0.858						
	TPU:	+/-0.394		+/-0.858						
Bismuth-212		0.471		0.431	pCi/g	9		(0% - 100%)		
	Uncert:	+/-0.203		+/-0.277						
	TPU:	+/-0.203		+/-0.277						
Bismuth-214		0.730		0.787	pCi/g	7		(0% - 20%)		
	Uncert:	+/-0.0944		+/-0.124						
	TPU:	+/-0.0944		+/-0.124						
Californium-249	U	0.00111	U	0.0202	pCi/g	179		N/A		
	Uncert:	+/-0.0159		+/-0.0277						
	TPU:	+/-0.0159		+/-0.0277						
Cesium-137		0.214		0.193	pCi/g	11		(0% - 100%)		

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 708133											
	Uncert:	+/-0.033		+/-0.0537							
	TPU:	+/-0.033		+/-0.0537							
Cobalt-60	U	-0.00372	U	0.010	pCi/g	436		N/A			
	Uncert:	+/-0.0166		+/-0.028							
	TPU:	+/-0.0166		+/-0.028							
Curium-243	UI	0.0915	U	0.0102	pCi/g	160*		(0% - 100%)			
	Uncert:	+/-0.0529		+/-0.0538							
	TPU:	+/-0.0529		+/-0.0538							
Europium-155	UI	0.102	U	0.074	pCi/g	32		(0% - 100%)			
	Uncert:	+/-0.0589		+/-0.0564							
	TPU:	+/-0.0589		+/-0.0564							
Lead-212		0.648		0.701	pCi/g	8		(0% - 20%)			
	Uncert:	+/-0.059		+/-0.0769							
	TPU:	+/-0.059		+/-0.0769							
Lead-214		0.825		0.842	pCi/g	2		(0% - 20%)			
	Uncert:	+/-0.0872		+/-0.114							
	TPU:	+/-0.0872		+/-0.114							
Neptunium-236	U	0.0283	U	0.0308	pCi/g	9		N/A			
	Uncert:	+/-0.0314		+/-0.0426							
	TPU:	+/-0.0314		+/-0.0426							
Neptunium-237	UI	0.357	UI	0.298	pCi/g	18		(0% - 100%)			
	Uncert:	+/-0.108		+/-0.113							
	TPU:	+/-0.108		+/-0.113							
Neptunium-239	U	0.0873	U	0.0691	pCi/g	23		N/A			
	Uncert:	+/-0.103		+/-0.138							
	TPU:	+/-0.103		+/-0.138							
Polonium-209	U	-1.07	U	1.49	pCi/g	1220		N/A			
	Uncert:	+/-2.78		+/-5.47							
	TPU:	+/-2.78		+/-5.47							
Potassium-40		3.89		4.03	pCi/g	4		(0% - 20%)			
	Uncert:	+/-0.498		+/-0.692							
	TPU:	+/-0.498		+/-0.692							
Protactinium-233	U	0.0117	U	-0.0218	pCi/g	665		N/A			
	Uncert:	+/-0.0261		+/-0.0424							
	TPU:	+/-0.0261		+/-0.0424							
Protactinium-234m	UI	3.22	U	-0.473	pCi/g	269*		(0% - 100%)			
	Uncert:	+/-3.09		+/-3.28							
	TPU:	+/-3.09		+/-3.28							
Radium-223	UI	0.229	U	0.170	pCi/g	29		(0% - 100%)			
	Uncert:	+/-0.107		+/-0.189							
	TPU:	+/-0.107		+/-0.189							
Rhodium-101	U	0.00109	U	-0.0167	pCi/g	228		N/A			
	Uncert:	+/-0.0156		+/-0.0198							
	TPU:	+/-0.0156		+/-0.0198							
Thallium-208		0.209		0.190	pCi/g	9		(0% - 20%)			
	Uncert:	+/-0.0321		+/-0.0554							
	TPU:	+/-0.0321		+/-0.0554							
Thorium-234		0.732		0.744	pCi/g	2		(0% - 100%)			

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708133										
	Uncert:	+/-0.263		+/-0.307						
	TPU:	+/-0.263		+/-0.307						
Uranium-235	U	0.0426	U	0.117	pCi/g	93		N/A		
	Uncert:	+/-0.124		+/-0.115						
	TPU:	+/-0.124		+/-0.115						
QC1201473848 LCS										
Actinium-228				0.933	pCi/g					12/17/0715:07
	Uncert:			+/-0.537						
	TPU:			+/-0.537						
Americium-241	16.0			13.5	pCi/g		85	(75%-125%)		
	Uncert:			+/-1.04						
	TPU:			+/-1.04						
Americium-243				0.239	pCi/g					
	Uncert:			+/-0.100						
	TPU:			+/-0.100						
Americium-246			U	0.139	pCi/g					
	Uncert:			+/-0.315						
	TPU:			+/-0.315						
Antimony-125			U	0.090	pCi/g					
	Uncert:			+/-0.163						
	TPU:			+/-0.163						
Bismuth-211			U	2.52	pCi/g					
	Uncert:			+/-2.14						
	TPU:			+/-2.14						
Bismuth-212			U	0.442	pCi/g					
	Uncert:			+/-0.546						
	TPU:			+/-0.546						
Bismuth-214				0.707	pCi/g					
	Uncert:			+/-0.197						
	TPU:			+/-0.197						
Californium-249			U	-0.023	pCi/g					
	Uncert:			+/-0.0749						
	TPU:			+/-0.0749						
Cesium-137	6.10			5.84	pCi/g		96	(75%-125%)		
	Uncert:			+/-0.505						
	TPU:			+/-0.505						
Cobalt-60	8.52			8.17	pCi/g		96	(75%-125%)		
	Uncert:			+/-0.547						
	TPU:			+/-0.547						
Curium-243			U	0.0522	pCi/g					
	Uncert:			+/-0.136						
	TPU:			+/-0.136						
Europium-155			U	-0.0678	pCi/g					
	Uncert:			+/-0.149						
	TPU:			+/-0.149						
Lead-212				0.872	pCi/g					
	Uncert:			+/-0.154						
	TPU:			+/-0.154						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 708133										
Lead-214				0.840	pCi/g					
	Uncert:			+/-0.201						
	TPU:			+/-0.201						
Neptunium-236			U	-0.00293	pCi/g					
	Uncert:			+/-0.081						
	TPU:			+/-0.081						
Neptunium-237				29.5	pCi/g					
	Uncert:			+/-2.31						
	TPU:			+/-2.31						
Neptunium-239			U	-0.0327	pCi/g					
	Uncert:			+/-0.347						
	TPU:			+/-0.347						
Polonium-209				228	pCi/g					
	Uncert:			+/-40.4						
	TPU:			+/-40.4						
Potassium-40				1.32	pCi/g					
	Uncert:			+/-0.667						
	TPU:			+/-0.667						
Protactinium-233			U	-0.00136	pCi/g					
	Uncert:			+/-0.106						
	TPU:			+/-0.106						
Protactinium-234m			U	2.31	pCi/g					
	Uncert:			+/-9.83						
	TPU:			+/-9.83						
Radium-223			U	0.0158	pCi/g					
	Uncert:			+/-0.290						
	TPU:			+/-0.290						
Rhodium-101			U	-0.00445	pCi/g					
	Uncert:			+/-0.0476						
	TPU:			+/-0.0476						
Thallium-208				0.429	pCi/g					
	Uncert:			+/-0.116						
	TPU:			+/-0.116						
Thorium-234			U	0.476	pCi/g					
	Uncert:			+/-0.968						
	TPU:			+/-0.968						
Uranium-235			U	0.0579	pCi/g					
	Uncert:			+/-0.264						
	TPU:			+/-0.264						
QC1201473846 MB										
Actinium-228			U	0.0277	pCi/g					12/17/0714:30
	Uncert:			+/-0.095						
	TPU:			+/-0.095						
Americium-241			U	0.00738	pCi/g					
	Uncert:			+/-0.0181						
	TPU:			+/-0.0181						
Americium-243			U	-0.0101	pCi/g					
	Uncert:			+/-0.0116						

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 708133											
	TPU:			+/-0.0116							
Americium-246			U	0.0757	pCi/g						
	Uncert:			+/-0.0629							
	TPU:			+/-0.0629							
Antimony-125			U	0.0311	pCi/g						
	Uncert:			+/-0.0353							
	TPU:			+/-0.0353							
Bismuth-211			U	0.223	pCi/g						
	Uncert:			+/-0.508							
	TPU:			+/-0.508							
Bismuth-212			U	-0.0283	pCi/g						
	Uncert:			+/-0.158							
	TPU:			+/-0.158							
Bismuth-214			U	0.0295	pCi/g						
	Uncert:			+/-0.0435							
	TPU:			+/-0.0435							
Californium-249			U	-0.0218	pCi/g						
	Uncert:			+/-0.017							
	TPU:			+/-0.017							
Cesium-137			U	0.0208	pCi/g						
	Uncert:			+/-0.0252							
	TPU:			+/-0.0252							
Cobalt-60			U	0.00438	pCi/g						
	Uncert:			+/-0.0195							
	TPU:			+/-0.0195							
Curium-243			U	-0.00795	pCi/g						
	Uncert:			+/-0.0291							
	TPU:			+/-0.0291							
Europium-155			U	-0.0165	pCi/g						
	Uncert:			+/-0.0323							
	TPU:			+/-0.0323							
Lead-212			U	-0.0063	pCi/g						
	Uncert:			+/-0.0277							
	TPU:			+/-0.0277							
Lead-214			U	0.000216	pCi/g						
	Uncert:			+/-0.0487							
	TPU:			+/-0.0487							
Neptunium-236			U	0.00572	pCi/g						
	Uncert:			+/-0.019							
	TPU:			+/-0.019							
Neptunium-237			U	-0.0477	pCi/g						
	Uncert:			+/-0.0579							
	TPU:			+/-0.0579							
Neptunium-239			U	-0.0125	pCi/g						
	Uncert:			+/-0.0787							
	TPU:			+/-0.0787							
Polonium-209			U	1.54	pCi/g						
	Uncert:			+/-4.34							

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 708133											
	TPU:			+/-4.34							
Potassium-40			U	-0.0824	pCi/g						
	Uncert:			+/-0.223							
	TPU:			+/-0.223							
Protactinium-233			U	-0.00377	pCi/g						
	Uncert:			+/-0.0241							
	TPU:			+/-0.0241							
Protactinium-234m			U	1.98	pCi/g						
	Uncert:			+/-1.79							
	TPU:			+/-1.79							
Radium-223			U	0.021	pCi/g						
	Uncert:			+/-0.0701							
	TPU:			+/-0.0701							
Rhodium-101			U	-0.00688	pCi/g						
	Uncert:			+/-0.014							
	TPU:			+/-0.014							
Thallium-208			U	-0.00758	pCi/g						
	Uncert:			+/-0.021							
	TPU:			+/-0.021							
Thorium-234			U	-0.288	pCi/g						
	Uncert:			+/-0.210							
	TPU:			+/-0.210							
Uranium-235			U	0.0376	pCi/g						
	Uncert:			+/-0.0904							
	TPU:			+/-0.0904							

Notes:
The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

QC Summary

Workorder: 198701

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 6

Batch# 708130 Product: 8-S Date: 12/17/07

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.			NA
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA
Aliquot Correction completed if required.			NA

GEL Laboratories, LLC

1/2/2007

Primary Review Performed By: KDet 12/17/07

Secondary Review Performed By: S. Eulam 12/17/07

SCAN
12/9 - 12/18

Gamma Spec Que Sheet

12/05/2007

Batch #:708130 Analyst: MJH1 First Client DueDate:12/18/2007 Internal Due Date: 12/09/2007

Gamma Spike Isotope: Mixed Gamma Spike Code: N/A Expiration Date: N/A Vol: N/A Nominal Concentration: N/A Co-60 8.520

Gamma LCS Isotope: Mixed Gamma LCS Code: 1032-A Expiration Date: ~~12/2/08~~ 12/3/08 Vol: 1.0mL Nominal Concentration: Cs-137 6.103 Am-241 15.96

Initials: MGH Prep Date: 12/5/07 Witness: N/A

Sample ID	Client Description / Container ID	Type	Hazard Code	RDL	Client	Matrix	Collect Date	Wet/Dry Aliquot (1/(g)/F)	Detector	Sealing Date/Time (if Applicable)
198689011-1	SB-CZ-SS-2146-BD	SAMPLE		.08 pCi/g	SCAN001	SOIL	18-OCT-07 00:00:00 LL	103.21	17	
198689012-1	SB-CZ-SS-2147-BD	SAMPLE		.08 pCi/g	SCAN001	SOIL	18-OCT-07 00:00:00 LL	104.61	6	
198689013-1	SB-CZ-SS-2148-BD	SAMPLE		.08 pCi/g	SCAN001	SOIL	18-OCT-07 00:00:00 LL	95.03	13	
198689014-1	SB-CZ-SS-2149-BD	SAMPLE		.08 pCi/g	SCAN001	SOIL	18-OCT-07 00:00:00 LL	100.01	20	
198701001-1	SB-CZ-SS-2322-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	104.86	21	
198701002-1	SB-CZ-SS-2323-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	109.88	23	
198701003-1	SB-CZ-SS-2324-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	128.67	6	
198701004-1	SB-CZ-SS-2325-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	87.79	17	
198701005-1	SB-CZ-SS-2326-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	115.53	23	
198701006-1	SB-CZ-SS-2327-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	124.84	3	
198701007-1	SB-CZ-SS-2328-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	112.09	20	
198701008-1	SB-CZ-SS-2329-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	115.01	11	
198701009-1	SB-CZ-SS-2330-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	115.73	12	
198701010-1	SB-CZ-SS-2331-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	114.50	14	
198701011-1	SB-CZ-SS-2332-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	113.08	2	
198701012-1	SB-CZ-SS-2333-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	118.31	19	
198701013-1	SB-CZ-SS-2334-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	127.91	22	
198701014-1	SB-CZ-SS-2335-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	106.19	5	
198701015-1	SB-CZ-SS-2322-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	118.48	20	
198701016-1	SB-CZ-SS-2323-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 LL	115.72	16	
1201473840-1	MB for batch 708130	MB		.08 pCi/g	QC ACCOUNT	SOIL	12/5/07 LL	127.91	21	
1201473841-1	SB-CZ-SS-2146-BD(198689011DUP	DUP		.08 pCi/g	QC ACCOUNT	SOIL	18-OCT-07 00:00:00 LL	103.26	23	
1201473842-1	LCS for batch 708130	LCS		.08 pCi/g	QC ACCOUNT	SOIL	12/5/07 LL	155.44	5	

MGH 12/11/07

GEL Laboratories LLC, Radiochemistry Division

Data Reviewed By: RDot 12/17/07

Failed RDL Report

Batch Id	Samp Id	Sample Type	Run Date	Parmname	Result	MDA	RDL
708130	198689011	SAMPLE	12-DEC-07				
708130	198689012	SAMPLE	12-DEC-07				
708130	198689013	SAMPLE	12-DEC-07				
708130	198689014	SAMPLE	12-DEC-07				
708130	198701001	SAMPLE	12-DEC-07				
708130	198701002	SAMPLE	12-DEC-07				
708130	198701003	SAMPLE	13-DEC-07				
708130	198701004	SAMPLE	13-DEC-07				
708130	198701005	SAMPLE	13-DEC-07				
708130	198701006	SAMPLE	13-DEC-07				
708130	198701007	SAMPLE	13-DEC-07				
708130	198701008	SAMPLE	13-DEC-07				
708130	198701009	SAMPLE	13-DEC-07				
708130	198701010	SAMPLE	13-DEC-07				
708130	198701011	SAMPLE	13-DEC-07				
708130	198701012	SAMPLE	13-DEC-07				
708130	198701013	SAMPLE	13-DEC-07				
708130	198701014	SAMPLE	13-DEC-07				
708130	198701015	SAMPLE	13-DEC-07				
708130	198701016	SAMPLE	13-DEC-07				
708130	1201473840	MB	13-DEC-07				
708130	1201473841	DUP	13-DEC-07				
708130	1201473842	LCS	14-DEC-07	Antimony-125	-0.1103	0.4149	0.200
				Bismuth-212	0.6227	1.309	0.500
				Thorium-234	0.9686	1.556	0.500
				Uranium-235	-0.09008	0.6523	0.500

GEL QUALS

Batch ID: 708130

Report run on: December 17, 2007 10:03 AM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198689011-1 12-DEC-2007 12:21	Americium-243	UI	UI	UI	Data rejected due to interference.		.1008			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3458			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2935			
198689012-1 12-DEC-2007 12:37	Americium-243	UI	UI	UI	Data rejected due to high peak-width.		.1419			
	Bismuth-212	UI	UI	UI	Data rejected due to no valid peak.		.3241		.5	.5
	Bismuth-214	UI	UI	UI	Data rejected due to low abundance.		.1844		.2	.2
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.1772			
	Thallium-208	UI	UI	UI	Data rejected due to low abundance.		.0796		.08	.08
198689013-1 12-DEC-2007 12:38	Americium-243	UI	UI	UI	Data rejected due to interference.		.1233			
	Cesium-137	UI	UI	UI	Data rejected due to no valid peak.		.09229		.1	.1
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4552			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		8.673			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3277			
198689014-1 12-DEC-2007 12:38	Americium-243	UI	UI	UI	Data rejected due to interference.		.1217			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3433			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2351			
198701001-1 12-DEC-2007 12:39	Americium-243	UI	UI	UI	Data rejected due to interference.		.122			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.2301			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3384			

GEL QUALS

Batch ID: 708130

Report run on: December 17, 2007 10:03 AM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701002-1 12-DEC-2007 12:39	Americium-243	UI	UI	UI	Data rejected due to interference.		.127			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4227			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2756			
198701003-1 13-DEC-2007 05:36	Americium-243	UI	UI	UI	Data rejected due to interference.		.1556			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.6241			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2299			
198701004-1 13-DEC-2007 05:36	Americium-243	UI	UI	UI	Data rejected due to interference.		.2764			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.7266			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3894			
198701005-1 13-DEC-2007 05:37	Americium-243	UI	UI	UI	Data rejected due to interference.		.1788			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.7503			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3243			
	Thorium-234	UI	UI	UI	Data rejected due to low abundance.		.9921		.5	.5
198701006-1 13-DEC-2007 05:38	Americium-243	UI	UI	UI	Data rejected due to interference.		.1383			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2181			
198701007-1 13-DEC-2007 06:55	Americium-243	UI	UI	UI	Data rejected due to interference.		.2169			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5028			
	Radium-223	UI	UI	UI	Data rejected due to high peak-width.		.3818			
198701008-1	Americium-243	UI	UI	UI	Data rejected due to interference.		.1316			

GEL QUALS

Batch ID: 708130

Report run on: December 17, 2007 10:03 AM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701008-1 13-DEC-2007 07:36	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.498			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2771			
198701009-1 13-DEC-2007 07:37	Americium-243	UI	UI	UI	Data rejected due to interference.		.1825			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.6613			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2577			
198701010-1 13-DEC-2007 07:37	Americium-243	UI	UI	UI	Data rejected due to interference.		.2494			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.7035			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2316			
198701011-1 13-DEC-2007 07:39	Americium-243	UI	UI	UI	Data rejected due to interference.		.09072			
	Curium-243	UI	UI	UI	Data rejected due to interference.		.1103			
	Europium-155	UI	UI	UI	Data rejected due to interference.		.1225		.5	.5
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2235			
198701012-1 13-DEC-2007 08:29	Americium-243	UI	UI	UI	Data rejected due to interference.		.1156			
	Bismuth-214	UI	UI	UI	Data rejected due to low abundance.		.485		.2	.2
	Europium-155	UI	UI	UI	Data rejected due to high peak-width.		.1199		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3822			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3508			
198701013-1 13-DEC-2007 08:56	Americium-243	UI	UI	UI	Data rejected due to interference.		.1821			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5105			

GEL QUALS

Batch ID: 708130

Report run on: December 17, 2007 10:03 AM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701013-1 13-DEC-2007 08:56	Radium-223	UI	UI	UI	Data rejected due to interference.		.4496			
198701014-1 13-DEC-2007 09:03	Americium-243	UI	UI	UI	Data rejected due to interference.		.2262			
	Neptunium-236	UI	UI	UI	Data rejected due to interference.		.0658			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.8183			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		6.257			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.4957			
198701015-1 13-DEC-2007 10:59	Americium-243	UI	UI	UI	Data rejected due to interference.		.1324			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3259			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2353			
198701016-1 13-DEC-2007 11:15	Americium-243	UI	UI	UI	Data rejected due to interference.		.1428			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3958			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.4148			
1201473841-1 DUP 13-DEC-2007 12:53	Americium-243	UI	UI	UI	Data rejected due to interference.		.1143			
	Cobalt-60	UI	UI	UI	Data rejected due to low abundance.		.07021		.1	.1
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3858			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2059			
	Thorium-234	UI	UI	UI	Data rejected due to low abundance.		.6279		.5	.5

Gamma Review Report based on Result > MDA for Batch:708130

SKE 12/15/07

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689011	18-OCT-07 00:00	12-DEC-07 12:21	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.5866	0.2203	pCi/g	0.1633	0.800	911.6	1	1.827	IDENTIFIED	18.87		
Americium-243 INT	0.1008	0.02639	pCi/g	0.03064	Y	74.87	1	0.9789	IDENTIFIED	12.96	☑ UI	
Bismuth-214 ✓	0.3703	0.1038	pCi/g	0.08309	0.200	609.3	1	1.278	IDENTIFIED	13.85		
Cesium-137 ✓	0.1114	0.04929	pCi/g	0.04354	0.100	662.2	1	1.36	IDENTIFIED	22.28		
Lead-212 ✓	0.5434	0.07584	pCi/g	0.0568	0.100	238.7	1	1.032	IDENTIFIED	5.904		
Lead-214 ✓	0.3809	0.07564	pCi/g	0.07048	0.100	352	1	1.11	IDENTIFIED	9.586		
Neptunium-237 INT	0.3458	0.1376	pCi/g	0.1495	Y	87.27	1	1.105	IDENTIFIED	20.02	☑ UI	
Potassium-40 ✓	4.146	0.6912	pCi/g	0.4349	1.00	1461	1	1.973	IDENTIFIED	8.061		
Radium-223 INT	0.2935	0.1437	pCi/g	0.1709	Y	270.4	1	1.536	IDENTIFIED	24.67	☑ UI	
Thallium-208 ✓	0.137	0.04214	pCi/g	0.04418	0.080	583.4	1	1.201	IDENTIFIED	15.31		
Thorium-234 ✓	0.7807	0.3773	pCi/g	0.3478	0.500	92.72	1	1.036	IDENTIFIED	24.39		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689012	18-OCT-07 00:00	12-DEC-07 12:37	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.3535	0.1303	pCi/g	0.1022	0.800	910.5	1	1.452	IDENTIFIED	18.1		
Americium-243 NPW	0.1419	0.04798	pCi/g	0.03452	Y	75.72	1	3.206	IDENTIFIED	16.75	☑ UI	Data rejected due to high peak-width.
Bismuth-212 NUP	0.3241	0.1721	pCi/g	0.2072	0.500	727.1	1	1.353	IDENTIFIED	26.82	☑ UI	
Bismuth-214 NA	0.1844	0.07695	pCi/g	0.09952	0.200	609	1	1.253	FAIL_ABUND	21.02	☑ UI	Data rejected due to low abundance.
Cesium-137 ✓	0.1567	0.03888	pCi/g	0.02973	0.100	661.4	1	1.436	IDENTIFIED	12.2		
Lead-212 ✓	0.2767	0.05098	pCi/g	0.04522	0.100	238.2	1	1.142	IDENTIFIED	8.867		
Lead-214 ✓	0.2211	0.06936	pCi/g	0.05412	0.100	351.6	1	1.519	IDENTIFIED	15.7		
Neptunium-237 INT	0.1772	0.09174	pCi/g	0.1475	Y	86.93	1	0.8758	IDENTIFIED	26.05	☑ UI	
Potassium-40 ✓	2.502	0.5234	pCi/g	0.2688	1.00	1460	1	1.95	IDENTIFIED	10.18		
Thallium-208 NA	0.0796	0.03457	pCi/g	0.04789	0.080	583	1	1.294	FAIL_ABUND	21.91	☑ UI	Data rejected due to low abundance.

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689013	18-OCT-07 00:00	12-DEC-07 12:38	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.4315	0.2253	pCi/g	0.2084	0.800	911.1	1	1.422	IDENTIFIED	26.46		
Americium-243 INT	0.1233	0.03154	pCi/g	0.03672	Y	75.01	1	0.9163	IDENTIFIED	12.44	☑ UI	
Bismuth-214 ✓	0.569	0.1207	pCi/g	0.1104	0.200	609.1	1	1.221	IDENTIFIED	10.16		
Cesium-137 NUP	0.09229	0.05681	pCi/g	0.05914	0.100	661.2	1	2.325	IDENTIFIED	31.14	☑ UI	
Lead-212 ✓	0.6427	0.08322	pCi/g	0.06878	0.100	238.6	1	1.005	IDENTIFIED	5.694		
Lead-214 ✓	0.5059	0.1134	pCi/g	0.1089	0.100	351.7	1	1.174	IDENTIFIED	11.13		
Neptunium-237 INT	0.4552	0.1503	pCi/g	0.1971	Y	87.31	1	1.053	IDENTIFIED	16.37	☑ UI	
Potassium-40 ✓	5.968	0.989	pCi/g	0.5086	1.00	1460	1	1.765	IDENTIFIED	7.984		
Protactinium-234m NUP	8.673	6.363	pCi/g	6.285	Y	1002	1	1.113	IDENTIFIED	37.31	☑ UI	
Radium-223 INT	0.3277	0.2352	pCi/g	0.223	Y	269.7	1	1.404	IDENTIFIED	36.51	☑ UI	
Thallium-208 ✓	0.2145	0.07275	pCi/g	0.05919	0.080	582.9	1	1.481	IDENTIFIED	16.93		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689014	18-OCT-07 00:00	12-DEC-07 12:38	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.309	0.1596	pCi/g	0.1218	0.800	911.7	1	1.61	IDENTIFIED	25.93		

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Gamma Review Report based on Result > MDA for Batch:708130

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689011	18-OCT-07 00:00	12-DEC-07 12:21	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.5866**	0.2203	pCi/g	**0.1633**	**0.800**	911.6	1	1.827	IDENTIFIED	18.87	☐	
Americium-243 INT	**0.1008**	0.02639	pCi/g	**0.03064**	**Y**	74.87	1	0.9789	IDENTIFIED	12.96	☑ UI	
Bismuth-214 ✓	**0.3703**	0.1038	pCi/g	**0.08309**	**0.200**	609.3	1	1.278	IDENTIFIED	13.85	☐	
Cesium-137 ✓	**0.1114**	0.04929	pCi/g	**0.04354**	**0.100**	662.2	1	1.36	IDENTIFIED	22.28	☐	
Lead-212 ✓	**0.5434**	0.07584	pCi/g	**0.0568**	**0.100**	238.7	1	1.032	IDENTIFIED	5.904	☐	
Lead-214 ✓	**0.3809**	0.07564	pCi/g	**0.07048**	**0.100**	352	1	1.11	IDENTIFIED	9.586	☐	
Neptunium-237 INT	**0.3458**	0.1376	pCi/g	**0.1495**	**Y**	87.27	1	1.105	IDENTIFIED	20.02	☑ UI	
Potassium-40 ✓	**4.146**	0.6912	pCi/g	**0.4349**	**1.00**	1461	1	1.973	IDENTIFIED	8.061	☐	
Radium-223 INT	**0.2935**	0.1437	pCi/g	**0.1709**	**Y**	270.4	1	1.536	IDENTIFIED	24.67	☑ UI	
Thallium-208 ✓	**0.137**	0.04214	pCi/g	**0.04418**	**0.080**	583.4	1	1.201	IDENTIFIED	15.31	☐	
Thorium-234 ✓	**0.7807**	0.3773	pCi/g	**0.3478**	**0.500**	92.72	1	1.036	IDENTIFIED	24.39	☐	

*** = Number of isotopes identified with a keyline at this energy.

SKE 12/15/07

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689012	18-OCT-07 00:00	12-DEC-07 12:37	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 LA	**0.3755**	0.1445	pCi/g	**0.2353**	**0.800**	910.5	1	1.671	FAIL_ABUND	18.97	☑ UI	Data rejected due to low abundance.
Americium-243 INT	**0.04636**	0.03383	pCi/g	**0.04298**	**Y**	74.49	1	0.9446	IDENTIFIED	37.01	☑ UI	
Bismuth-214 LA	**0.2128**	0.09044	pCi/g	**0.1249**	**0.200**	608.9	1	1.169	FAIL_ABUND	21.42	☑ UI	Data rejected due to low abundance.
Cesium-137 ✓	**0.1927**	0.04856	pCi/g	**0.03474**	**0.100**	661.4	1	1.64	IDENTIFIED	12.41	☐	
Lead-212 ✓	**0.2967**	0.05835	pCi/g	**0.05818**	**0.100**	238.2	1	1.224	IDENTIFIED	9.536	☐	
Lead-214 ✓	**0.2084**	0.07631	pCi/g	**0.06765**	**0.100**	351.6	1	1.46	IDENTIFIED	18.42	☐	
Potassium-40 ✓	**2.328**	0.6326	pCi/g	**0.3408**	**1.00**	1460	1	2.073	IDENTIFIED	13.49	☐	
Thallium-208 LA	**0.09872**	0.04042	pCi/g	**0.05879**	**0.080**	583.1	1	1.584	FAIL_ABUND	20.62	☑ UI	Data rejected due to low abundance.

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689013	18-OCT-07 00:00	12-DEC-07 12:38	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.4315**	0.2253	pCi/g	**0.2084**	**0.800**	911.1	1	1.422	IDENTIFIED	26.46	☐	
Americium-243 INT	**0.1233**	0.03154	pCi/g	**0.03672**	**Y**	75.01	1	0.9163	IDENTIFIED	12.44	☑ UI	
Bismuth-214 ✓	**0.569**	0.1207	pCi/g	**0.1104**	**0.200**	609.1	1	1.221	IDENTIFIED	10.16	☐	
Cesium-137 NVP	**0.09229**	0.05681	pCi/g	**0.05914**	**0.100**	661.2	1	2.325	IDENTIFIED	31.14	☑ UI	
Lead-212 ✓	**0.6427**	0.08322	pCi/g	**0.06878**	**0.100**	238.6	1	1.005	IDENTIFIED	5.694	☐	
Lead-214 ✓	**0.5059**	0.1134	pCi/g	**0.1089**	**0.100**	351.7	1	1.174	IDENTIFIED	11.13	☐	
Neptunium-237 INT	**0.4552**	0.1503	pCi/g	**0.1971**	**Y**	87.31	1	1.053	IDENTIFIED	16.37	☑ UI	
Potassium-40 ✓	**5.968**	0.989	pCi/g	**0.5086**	**1.00**	1460	1	1.765	IDENTIFIED	7.984	☐	
Protactinium-234m NVP	**8.673**	6.363	pCi/g	**6.285**	**Y**	1002	1	1.113	IDENTIFIED	37.31	☑ UI	
Radium-223 INT	**0.3277**	0.2352	pCi/g	**0.223**	**Y**	269.7	1	1.404	IDENTIFIED	36.51	☑ UI	
Thallium-208 ✓	**0.2145**	0.07275	pCi/g	**0.05919**	**0.080**	582.9	1	1.481	IDENTIFIED	16.93	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198689014	18-OCT-07 00:00	12-DEC-07 12:38	55.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.309**	0.1596	pCi/g	**0.1218**	**0.800**	911.7	1	1.61	IDENTIFIED	25.93	☐	
Americium-243 INT	**0.1217**	0.03495	pCi/g	**0.0352**	**Y**	74.91	1	1.292	IDENTIFIED	13.61	☑ UI	
Bismuth-212 ✓	**0.2545**	0.2012	pCi/g	**0.2518**	**0.500**	727.6	1	1.929	IDENTIFIED	40.16	☐	

Bismuth-214 ✓	**0.3753**	0.0841	pCi/g	**0.0597**	**0.200**	609.5	1	0.8969	IDENTIFIED	10.96	☐
Cesium-137 ✓	**0.2198**	0.043	pCi/g	**0.03076**	**0.100**	661.9	1	1.461	IDENTIFIED	9.376	☐
Lead-212 ✓	**0.4541**	0.05912	pCi/g	**0.04699**	**0.100**	238.6	1	1.136	IDENTIFIED	5.969	☐
Lead-214 ✓	**0.4128**	0.07856	pCi/g	**0.06124**	**0.100**	352	1	1.37	IDENTIFIED	9.305	☐
Neptunium-237 INT	**0.3433**	0.1494	pCi/g	**0.1896**	**Y**	87.33	1	1.365	IDENTIFIED	21.41	☑ UI
Potassium-40 ✓	**3.25**	0.5744	pCi/g	**0.2459**	**1.00**	1461	1	1.736	IDENTIFIED	7.977	☐
Radium-223 INT	**0.2351**	0.1687	pCi/g	**0.164**	**Y**	270.1	1	2.45	IDENTIFIED	36.49	☑ UI
Thallium-208 ✓	**0.1451**	0.03247	pCi/g	**0.02739**	**0.080**	583.3	1	1.688	IDENTIFIED	10.98	☐
Thorium-234 ✓	**0.8912**	0.4578	pCi/g	**0.3811**	**0.500**	93.03	1	1.439	IDENTIFIED	25.66	☐

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701001	28-SEP-07 00:00	12-DEC-07 12:39	75.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.5501**	0.1992	pCi/g	**0.1635**	**0.800**	910.7	1	1.413	IDENTIFIED	18.17	☐	
Americium-243 INT	**0.122**	0.03029	pCi/g	**0.02822**	**Y**	74.95	1	1.86	IDENTIFIED	12.19	☑ UI	
Bismuth-214 ✓	**0.4273**	0.1238	pCi/g	**0.09204**	**0.200**	609.4	1	1.515	IDENTIFIED	14.28	☐	
Cesium-137 ✓	**0.2249**	0.06991	pCi/g	**0.04857**	**0.100**	661.8	1	1.396	IDENTIFIED	15.32	☐	
Lead-212 ✓	**0.582**	0.07084	pCi/g	**0.05852**	**0.100**	238.5	1	1.397	IDENTIFIED	5.402	☐	
Lead-214 ✓	**0.4633**	0.1001	pCi/g	**0.0818**	**0.100**	352	1	1.557	IDENTIFIED	10.71	☐
Neptunium-237 INT	**0.2301**	0.09738	pCi/g	**0.176**	**Y**	87.16	1	1.091	IDENTIFIED	21.27	☑ UI
Potassium-40 ✓	**3.381**	0.7816	pCi/g	**0.4971**	**1.00**	1461	1	2.081	IDENTIFIED	11.47	☐
Radium-223 INT	**0.3384**	0.1798	pCi/g	**0.1857**	**Y**	270.1	1	1.54	IDENTIFIED	26.97	☑ UI
Thallium-208 ✓	**0.1869**	0.05436	pCi/g	**0.03651**	**0.080**	583.5	1	1.548	IDENTIFIED	14.38	☐
Thorium-234 ✓	**0.3523**	0.2367	pCi/g	**0.3067**	**0.500**	92.87	1	1.084	IDENTIFIED	34.07	☐

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701002	28-SEP-07 00:00	12-DEC-07 12:39	75.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.8308**	0.1894	pCi/g	**0.1445**	**0.800**	911	1	1.569	IDENTIFIED	10.92	☐	
Americium-243 INT	**0.127**	0.03718	pCi/g	**0.04519**	**Y**	75.05	1	0.9789	IDENTIFIED	14.51	☑ UI	
Bismuth-212 ✓	**0.4317**	0.2827	pCi/g	**0.3051**	**0.500**	727.4	1	1.787	IDENTIFIED	33.26	☐
Bismuth-214 ✓	**0.5979**	0.1172	pCi/g	**0.07779**	**0.200**	609.1	1	1.554	IDENTIFIED	9.576	☐
Cesium-137 ✓	**0.09136**	0.04077	pCi/g	**0.04366**	**0.100**	661.6	1	1.728	IDENTIFIED	22.58	☐
Lead-212 ✓	**0.6392**	0.06976	pCi/g	**0.06104**	**0.100**	238.6	1	0.9153	IDENTIFIED	4.802	☐
Lead-214 ✓	**0.6863**	0.1075	pCi/g	**0.07182**	**0.100**	352	1	1.227	IDENTIFIED	7.521	☐
Neptunium-237 INT	**0.4227**	0.1667	pCi/g	**0.19**	**Y**	87.28	1	1.228	IDENTIFIED	19.78	☑ UI
Potassium-40 ✓	**5.871**	0.7751	pCi/g	**0.3608**	**1.00**	1460	1	2.077	IDENTIFIED	5.714	☐
Radium-223 INT	**0.2756**	0.1907	pCi/g	**0.1766**	**Y**	270.9	1	1.021	IDENTIFIED	35.19	☑ UI
Thallium-208 ✓	**0.2234**	0.04748	pCi/g	**0.03788**	**0.080**	582.9	1	1.552	IDENTIFIED	10.46	☐
Thorium-234 ✓	**0.7325**	0.4079	pCi/g	**0.4061**	**0.500**	92.77	1	1.193	IDENTIFIED	28.18	☐

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701003	28-SEP-07 00:00	13-DEC-07 05:36	76.2	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.7617**	0.2021	pCi/g	**0.1451**	**0.800**	911	1	1.862	IDENTIFIED	12.55	☐	
Americium-243 INT	**0.1556**	0.03997	pCi/g	**0.05073**	**Y**	74.48	1	1.066	IDENTIFIED	12.44	☑ UI	
Bismuth-212 ✓	**0.4084**	0.3191	pCi/g	**0.3101**	**0.500**	727.4	1	1.338	IDENTIFIED	39.68	☐
Bismuth-214 ✓	**0.7651**	0.1148	pCi/g	**0.06882**	**0.200**	608.9	1	1.378	IDENTIFIED	6.882	☐
Cesium-137 ✓	**0.1706**	0.04676	pCi/g	**0.04125**	**0.100**	661.2	1	1.435	IDENTIFIED	13.57	☐
Lead-212 ✓	**0.9312**	0.09003	pCi/g	**0.05973**	**0.100**	238.3	1	1.136	IDENTIFIED	3.819	☐
Lead-214 ✓	**0.9391**	0.1119	pCi/g	**0.06792**	**0.100**	351.6	1	1.229	IDENTIFIED	5.214	☐
Neptunium-237 INT	**0.6241**	0.1871	pCi/g	**0.2053**	**Y**	86.83	1	1.317	IDENTIFIED	14.65	☑ UI
Potassium-40 ✓	**7.352**	0.8773	pCi/g	**0.3631**	**1.00**	1460	1	1.691	IDENTIFIED	5.178	☐

Radium-223 INT	**0.2299**	0.2074	pCi/g	**0.1928**	**Y**	269.8	1	1.335	IDENTIFIED	45.92	☑ UI
Thallium-208 ✓	**0.2545**	0.05094	pCi/g	**0.03597**	**0.080**	582.9	1	1.554	IDENTIFIED	9.648	☐
Thorium-234 ✓	**0.9324**	0.3987	pCi/g	**0.4426**	**0.500**	92.2	1	1.231	IDENTIFIED	21.42	☐

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701004	28-SEP-07 00:00	13-DEC-07 05:36	76.2	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**1.69**	0.3212	pCi/g	**0.1862**	**0.800**	911.2	1	1.363	IDENTIFIED	9.103	☐	
Americium-243 INT	**0.2764**	0.04136	pCi/g	**0.04132**	**Y**	74.94	1	0.9683	IDENTIFIED	6.915	☑ UI	
Bismuth-212 ✓	**0.8269**	0.5454	pCi/g	**0.447**	**0.500**	727.5	1	1.691	IDENTIFIED	33.45	☐	
Bismuth-214 ✓	**1.046**	0.1639	pCi/g	**0.1031**	**0.200**	609.5	1	1.305	IDENTIFIED	7.154	☐	
Cesium-137 ✓	**0.1507**	0.05642	pCi/g	**0.05669**	**0.100**	661.9	1	1.616	IDENTIFIED	18.74	☐	
Lead-212 ✓	**1.3**	0.1371	pCi/g	**0.06881**	**0.100**	238.7	1	0.9726	IDENTIFIED	3.62	☐	
Lead-214 ✓	**1.006**	0.1517	pCi/g	**0.09962**	**0.100**	352	1	1.168	IDENTIFIED	6.956	☐	
Neptunium-237 INT	**0.7266**	0.1921	pCi/g	**0.2021**	**Y**	87.33	1	1.105	IDENTIFIED	13.06	☑ UI	
Potassium-40 ✓	**7.951**	1.021	pCi/g	**0.5309**	**1.00**	1461	1	1.846	IDENTIFIED	5.961	☐	
Radium-223 INT	**0.3894**	0.2983	pCi/g	**0.2272**	**Y**	269.6	1	1.858	IDENTIFIED	38.89	☑ UI	
Thallium-208 ✓	**0.432**	0.07876	pCi/g	**0.05616**	**0.080**	583.4	1	1.488	IDENTIFIED	8.624	☐	
Thorium-234 ✓	**1.823**	0.5341	pCi/g	**0.4702**	**0.500**	92.83	1	1.117	IDENTIFIED	14.51	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701005	28-SEP-07 00:00	13-DEC-07 05:37	76.2	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.7452**	0.1906	pCi/g	**0.143**	**0.800**	911.2	1	1.587	IDENTIFIED	12.42	☐	
Americium-243 INT	**0.1788**	0.04113	pCi/g	**0.05111**	**Y**	74.93	1	0.9293	IDENTIFIED	11.19	☑ UI	
Bismuth-212 ✓	**0.4867**	0.3769	pCi/g	**0.2869**	**0.500**	727.5	1	1.572	IDENTIFIED	39.38	☐	
Bismuth-214 ✓	**0.8363**	0.1138	pCi/g	**0.08286**	**0.200**	609.1	1	1.414	IDENTIFIED	6.313	☐	
Cesium-137 ✓	**0.1938**	0.04237	pCi/g	**0.04065**	**0.100**	661.6	1	1.501	IDENTIFIED	10.76	☐	
Lead-212 ✓	**0.7482**	0.07517	pCi/g	**0.0579**	**0.100**	238.7	1	1.016	IDENTIFIED	4.281	☐	
Lead-214 ✓	**0.9435**	0.1102	pCi/g	**0.07309**	**0.100**	351.9	1	1.187	IDENTIFIED	5.315	☐	
Neptunium-237 INT	**0.7503**	0.2579	pCi/g	**0.1819**	**Y**	86.43	1	1.176	IDENTIFIED	17.14	☑ UI	
Potassium-40 ✓	**4.378**	0.756	pCi/g	**0.3438**	**1.00**	1460	1	1.765	IDENTIFIED	8.056	☐	
Radium-223 INT	**0.3243**	0.1677	pCi/g	**0.1756**	**Y**	270.1	1	1.264	IDENTIFIED	26.22	☑ UI	
Thallium-208 ✓	**0.1775**	0.04623	pCi/g	**0.03988**	**0.080**	583.2	1	1.344	IDENTIFIED	12.98	☐	
Thorium-234 LA	**0.9921**	0.4065	pCi/g	**0.6067**	**0.500**	92.83	1	1.247	FAIL_ABUND	20.59	☑ UI	Data rejected due to low abundance.

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701006	28-SEP-07 00:00	13-DEC-07 05:38	76.2	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.8475**	0.212	pCi/g	**0.1349**	**0.800**	912	1	1.92	IDENTIFIED	11.47	☐	
Americium-243 INT	**0.1383**	0.04624	pCi/g	**0.05031**	**Y**	74.87	1	1.5	IDENTIFIED	16.61	☑ UI	
Bismuth-212 ✓	**0.7373**	0.3258	pCi/g	**0.2745**	**0.500**	727.6	1	2.205	IDENTIFIED	22.2	☐	
Bismuth-214 ✓	**0.587**	0.1106	pCi/g	**0.07383**	**0.200**	609.8	1	2.079	IDENTIFIED	8.994	☐	
Cesium-137 ✓	**0.04652**	0.04167	pCi/g	**0.03965**	**0.100**	661.7	1	1.728	IDENTIFIED	45.57	☐	
Lead-212 ✓	**0.8908**	0.09028	pCi/g	**0.05862**	**0.100**	238.7	1	1.654	IDENTIFIED	4.043	☐	
Lead-214 ✓	**0.7655**	0.1039	pCi/g	**0.07037**	**0.100**	352	1	1.985	IDENTIFIED	6.138	☐	
Potassium-40 ✓	**5.214**	0.7302	pCi/g	**0.3567**	**1.00**	1462	1	3.019	IDENTIFIED	6.533	☑ ~~UI — Data rejected due to high peak width.~~	JB 12/14/07
Radium-223 INT	**0.2181**	0.1424	pCi/g	**0.1765**	**Y**	269.6	1	1.601	IDENTIFIED	33.15	☑ UI	
Thallium-208 ✓	**0.2653**	0.0556	pCi/g	**0.03842**	**0.080**	583.5	1	2.255	IDENTIFIED	10.14	☐	
Thorium-234 ✓	**0.6456**	0.6479	pCi/g	**0.5021**	**0.500**	93.41	1	1.45	IDENTIFIED	51.05	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701007	28-SEP-07 00:00	13-DEC-07 06:55	76.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**1.153**	0.2055	pCi/g	**0.118**	**0.800**	911.5	1	1.458	IDENTIFIED	7.789	☐	
Americium-243 INT	**0.2169**	0.0423	pCi/g	**0.043**	**Y**	74.94	1	1.242	IDENTIFIED	8.337	☑ UI	
Bismuth-212 ✓	**0.7926**	0.2866	pCi/g	**0.2453**	**0.500**	727.7	1	1.623	IDENTIFIED	18.06	☐	
Bismuth-214 ✓	**0.8913**	0.1086	pCi/g	**0.06368**	**0.200**	609.4	1	1.574	IDENTIFIED	5.3	☐	
Cesium-137 ✓	**0.2932**	0.04742	pCi/g	**0.03567**	**0.100**	661.9	1	1.231	IDENTIFIED	7.512	☐	
Lead-212 ✓	**1.013**	0.08852	pCi/g	**0.05407**	**0.100**	238.7	1	1.111	IDENTIFIED	3.376	☐	
Lead-214 ✓	**0.9157**	0.1087	pCi/g	**0.06641**	**0.100**	351.9	1	1.359	IDENTIFIED	5.384	☐	
Neptunium-237 INT	**0.5028**	0.1458	pCi/g	**0.196**	**Y**	87.34	1	1.07	IDENTIFIED	13.57	☑ UI	
Potassium-40 ✓	**6.776**	0.8758	pCi/g	**0.3745**	**1.00**	1461	1	1.795	IDENTIFIED	5.081	☐	
Radium-223 ↑PW	**0.3818**	0.2811	pCi/g	**0.1865**	**Y**	268.6	1	7.423	IDENTIFIED	37.43	☑ UI	Data rejected due to high peak-width.
Thallium-208 ✓	**0.3327**	0.05192	pCi/g	**0.02842**	**0.080**	583.3	1	1.382	IDENTIFIED	7.308	☐	
Thorium-234 ✓	**1.107**	0.3849	pCi/g	**0.4331**	**0.500**	92.74	1	1.22	IDENTIFIED	16.91	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701008	28-SEP-07 00:00	13-DEC-07 07:36	76.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.8521**	0.1617	pCi/g	**0.09567**	**0.800**	911.5	1	1.398	IDENTIFIED	8.627	☐	
Americium-243 INT	**0.1316**	0.02827	pCi/g	**0.03553**	**Y**	74.76	1	0.8451	IDENTIFIED	10.46	☑ UI	
Bismuth-212 ✓	**0.5766**	0.2779	pCi/g	**0.2328**	**0.500**	727.7	1	1.634	IDENTIFIED	24.26	☐	
Bismuth-214 ✓	**0.6019**	0.09555	pCi/g	**0.05283**	**0.200**	609.3	1	1.444	IDENTIFIED	7.281	☐	
Cesium-137 ✓	**0.2497**	0.04604	pCi/g	**0.03289**	**0.100**	661.9	1	1.226	IDENTIFIED	8.598	☐	
Lead-212 ✓	**0.8583**	0.07592	pCi/g	**0.04328**	**0.100**	238.6	1	0.9911	IDENTIFIED	3.425	☐	
Lead-214 ✓	**0.6425**	0.08732	pCi/g	**0.05655**	**0.100**	351.9	1	1.191	IDENTIFIED	6.362	☐	
Neptunium-237 INT	**0.498**	0.1505	pCi/g	**0.1464**	**Y**	87.09	1	1.267	IDENTIFIED	14.98	☑ UI	
Potassium-40 ✓	**3.871**	0.5654	pCi/g	**0.2811**	**1.00**	1461	1	1.954	IDENTIFIED	6.573	☐	
Radium-223 INT	**0.2771**	0.1447	pCi/g	**0.1359**	**Y**	270.1	1	0.9051	IDENTIFIED	26.47	☑ UI	
Thallium-208 ✓	**0.2314**	0.04749	pCi/g	**0.02978**	**0.080**	583.2	1	1.242	IDENTIFIED	9.899	☐	
Thorium-234 ✓	**1.08**	0.3341	pCi/g	**0.3232**	**0.500**	92.65	1	1.127	IDENTIFIED	15.39	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701009	28-SEP-07 00:00	13-DEC-07 07:37	76.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.8522**	0.1886	pCi/g	**0.1292**	**0.800**	910.7	1	1.7	IDENTIFIED	10.02	☐	
Americium-243 INT	**0.1825**	0.04288	pCi/g	**0.05192**	**Y**	74.88	1	1.232	IDENTIFIED	11.43	☑ UI	
Bismuth-212 ✓	**0.7194**	0.3161	pCi/g	**0.2587**	**0.500**	727.5	1	1.817	IDENTIFIED	21.92	☐	
Bismuth-214 ✓	**0.6945**	0.1103	pCi/g	**0.06508**	**0.200**	609	1	1.409	IDENTIFIED	6.996	☐	
Cesium-137 ✓	**0.1683**	0.05957	pCi/g	**0.03831**	**0.100**	661.3	1	1.572	IDENTIFIED	17.51	☐	
Lead-212 ✓	**0.8897**	0.08505	pCi/g	**0.05818**	**0.100**	238.6	1	1.2	IDENTIFIED	3.785	☐	
Lead-214 ✓	**0.7231**	0.09886	pCi/g	**0.0735**	**0.100**	351.8	1	1.335	IDENTIFIED	6.327	☐	
Neptunium-237 INT	**0.6613**	0.265	pCi/g	**0.226**	**Y**	86.23	1	1.127	IDENTIFIED	20.06	☑ UI	
Potassium-40 ✓	**4.021**	0.675	pCi/g	**0.3569**	**1.00**	1460	1	1.728	IDENTIFIED	8.004	☐	
Radium-223 INT	**0.2577**	0.1555	pCi/g	**0.1769**	**Y**	269.9	1	1.821	IDENTIFIED	30.63	☑ UI	
Thallium-208 ✓	**0.2588**	0.05063	pCi/g	**0.03353**	**0.080**	582.9	1	1.24	IDENTIFIED	9.175	☐	
Thorium-234 ✓	**1.019**	0.4606	pCi/g	**0.4221**	**0.500**	92.82	1	1.39	IDENTIFIED	22.73	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701010	28-SEP-07 00:00	13-DEC-07 07:37	76.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**1.239**	0.2051	pCi/g	**0.1419**	**0.800**	911.3	1	1.883	IDENTIFIED	7.194	☐	
Americium-243 INT	**0.2494**	0.04775	pCi/g	**0.04857**	**Y**	74.87	1	1.54	IDENTIFIED	9.033	☑ UI	
Bismuth-212 ✓	**0.8658**	0.3198	pCi/g	**0.2883**	**0.500**	727.5	1	1.738	IDENTIFIED	18.4	☐	

Bismuth-214 ✓	**1.363**	0.1518	pCi/g	**0.07324**	**0.200**	609.2	1	1.56	IDENTIFIED	4.313		
Cesium-137 ✓	**0.1602**	0.04902	pCi/g	**0.04197**	**0.100**	661.8	1	1.634	IDENTIFIED	15.12		
Gross Gamma	**7.034**	1.641	pCi/g	**2.556**	N		0					
Lead-212 ✓	**1.158**	0.1021	pCi/g	**0.06141**	**0.100**	238.5	1	1.429	IDENTIFIED	3.247		
Lead-214 ✓	**1.32**	0.1396	pCi/g	**0.07109**	**0.100**	351.7	1	1.373	IDENTIFIED	4.497		
Neptunium-237 INT	**0.7035**	0.1756	pCi/g	**0.2132**	Y	87.19	1	1.344	IDENTIFIED	12.04	☑ UI	
Potassium-40 ✓	**8.587**	0.9175	pCi/g	**0.3547**	**1.00**	1461	1	2.016	IDENTIFIED	4.689		
Radium-223 INT	**0.2316**	0.1693	pCi/g	**0.1981**	Y	270.7	1	1.493	IDENTIFIED	37.15	☑ UI	
Thallium-208 ✓	**0.312**	0.05817	pCi/g	**0.03596**	**0.080**	583	1	1.698	IDENTIFIED	8.806		
Thorium-234 ✓	**1.884**	0.5131	pCi/g	**0.4708**	**0.500**	92.86	1	1.826	IDENTIFIED	13.31		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701011	28-SEP-07 00:00	13-DEC-07 07:39	76.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.5801**	0.1564	pCi/g	**0.1208**	**0.800**	911	1	1.52	IDENTIFIED	13.19		
Americium-243 INT	**0.09072**	0.04013	pCi/g	**0.04743**	Y	74.85	1	1.036	IDENTIFIED	22.19	☑ UI	
Bismuth-212 ✓	**0.4309**	0.2585	pCi/g	**0.255**	**0.500**	727.6	1	2.429	IDENTIFIED	30.43		
Bismuth-214 ✓	**0.3404**	0.09257	pCi/g	**0.06453**	**0.200**	609.5	1	1.252	IDENTIFIED	13.54		
Cesium-137 ✓	**0.2752**	0.0471	pCi/g	**0.03846**	**0.100**	661.5	1	1.509	IDENTIFIED	8.169		
Curium-243 INT	**0.1103**	0.07397	pCi/g	**0.0801**	Y	105.7	2	1.424	IDENTIFIED	34.05	☑ UI	
Europium-155 INT	**0.1225**	0.08221	pCi/g	**0.08974**	**0.500**	105.7	2	1.424	IDENTIFIED	34.05	☑ UI	
Lead-212 ✓	**0.3522**	0.06548	pCi/g	**0.07637**	**0.100**	238.6	1	1.084	IDENTIFIED	8.968		
Lead-214 ✓	**0.3668**	0.08737	pCi/g	**0.06213**	**0.100**	351.7	1	1.117	IDENTIFIED	11.79		
Potassium-40 ✓	**2.894**	0.543	pCi/g	**0.3018**	**1.00**	1460	1	1.453	IDENTIFIED	8.989		
Radium-223 INT	**0.2235**	0.1429	pCi/g	**0.1491**	Y	270.5	1	1.168	IDENTIFIED	32.43	☑ UI	
Thallium-208 ✓	**0.1474**	0.04803	pCi/g	**0.03001**	**0.080**	583.4	1	1.716	IDENTIFIED	16.35		
Thorium-234 ✓	**0.8772**	0.5135	pCi/g	**0.4457**	**0.500**	92.87	1	1.137	IDENTIFIED	29.6		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701012	28-SEP-07 00:00	13-DEC-07 08:29	76.4	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.7103**	0.1688	pCi/g	**0.1181**	**0.800**	911.8	1	1.749	IDENTIFIED	10.95		
Americium-243 INT	**0.1156**	0.03382	pCi/g	**0.04511**	Y	74.95	1	1.21	IDENTIFIED	14.58	☑ UI	
Bismuth-212 ✓	**0.3959**	0.2346	pCi/g	**0.2516**	**0.500**	727.9	1	1.695	IDENTIFIED	29.91		
Bismuth-214 LA	**0.485**	0.0978	pCi/g	**0.1444**	**0.200**	609.6	1	1.261	FAIL_ABUND	9.556	☑ UI	Data rejected due to low abundance.
Cesium-137 ✓	**0.2144**	0.04497	pCi/g	**0.03495**	**0.100**	662	1	1.584	IDENTIFIED	9.913		
Europium-155 ↑PW	**0.1199**	0.09994	pCi/g	**0.09011**	**0.500**	105.8	1	4.825	IDENTIFIED	42.4	☑ UI	Data rejected due to high peak-width.
Lead-212 ✓	**0.602**	0.06964	pCi/g	**0.05314**	**0.100**	238.7	1	1.332	IDENTIFIED	4.992		
Lead-214 ✓	**0.6584**	0.09357	pCi/g	**0.06141**	**0.100**	352	1	1.571	IDENTIFIED	6.6		
Neptunium-237 INT	**0.3822**	0.1208	pCi/g	**0.2004**	Y	87.46	1	1.367	IDENTIFIED	15.76	☑ UI	
Potassium-40 ✓	**5.125**	0.6403	pCi/g	**0.2722**	**1.00**	1462	1	2.104	IDENTIFIED	5.563		
Radium-223 INT	**0.3508**	0.2182	pCi/g	**0.1538**	Y	270.5	1	1.734	IDENTIFIED	31.57	☑ UI	
Thallium-208 ✓	**0.1774**	0.04555	pCi/g	**0.02957**	**0.080**	583.5	1	1.557	IDENTIFIED	12.57		
Thorium-234 ✓	**0.586**	0.3568	pCi/g	**0.4096**	**0.500**	92.76	1	1.346	IDENTIFIED	30.89		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701013	28-SEP-07 00:00	13-DEC-07 08:56	76.4	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.8316**	0.1665	pCi/g	**0.109**	**0.800**	910.7	1	1.89	IDENTIFIED	8.935		
Americium-243 INT	**0.1821**	0.05539	pCi/g	**0.03807**	Y	74.6	1	2.421	IDENTIFIED	15.02	☑ UI	
Bismuth-212 ✓	**0.544**	0.2052	pCi/g	**0.2076**	**0.500**	726.9	1	0.8691	IDENTIFIED	18.69		
Bismuth-214 ✓	**0.805**	0.1008	pCi/g	**0.0519**	**0.200**	609.1	1	1.601	IDENTIFIED	4.95		
Cesium-137 ✓	**0.1585**	0.03129	pCi/g	**0.02983**	**0.100**	661.3	1	1.784	IDENTIFIED	9.064		

Gross Gamma	**5.21**	1.362	pCi/g	**1.856**	N		0				☐
Lead-212 ✓	**0.9091**	0.0754	pCi/g	**0.0463**	**0.100**	238.4	1	1.316	IDENTIFIED	2.994	☐
Lead-214 ✓	**0.9254**	0.09301	pCi/g	**0.05408**	**0.100**	351.7	1	1.359	IDENTIFIED	4.248	☐
Neptunium-237 INT	**0.5105**	0.1454	pCi/g	**0.1692**	Y	87.05	1	1.267	IDENTIFIED	13.87	☑ uI
Potassium-40 ✓	**7.381**	0.73	pCi/g	**0.2268**	**1.00**	1460	1	2.71	IDENTIFIED	4.102	☐
Radium-223 INT	**0.4496**	0.1593	pCi/g	**0.1428**	Y	269.5	1	2.143	IDENTIFIED	17.83	☑ uI
Thallium-208 ✓	**0.2522**	0.03844	pCi/g	**0.02702**	**0.080**	582.7	1	1.902	IDENTIFIED	6.745	☐
Thorium-234 ✓	**0.6613**	0.3193	pCi/g	**0.3712**	**0.500**	92.51	1	1.197	IDENTIFIED	24.29	☐

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701014	28-SEP-07 00:00	13-DEC-07 09:03	76.4	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	**1.02**	0.2723	pCi/g	**0.2056**	**0.800**	911.7	1	1.466	IDENTIFIED	12.82	☐	
Americium-243 INT	**0.2262**	0.04008	pCi/g	**0.03896**	Y	74.71	1	1.31	IDENTIFIED	8.072	☑ uI	
Bismuth-212 ✓	**0.7808**	0.4493	pCi/g	**0.3752**	**0.500**	728.1	1	1.828	IDENTIFIED	29.05	☐	
Bismuth-214 ✓	**0.8649**	0.1362	pCi/g	**0.09567**	**0.200**	609.5	1	1.668	IDENTIFIED	7.107	☐	
Cesium-137 ✓	**0.2185**	0.0624	pCi/g	**0.05333**	**0.100**	661.8	1	1.294	IDENTIFIED	13.99	☐	
Gross Gamma	**6.108**	2.119	pCi/g	**3.214**	N		0				☐	
Lead-212 ✓	**1.123**	0.1247	pCi/g	**0.06898**	**0.100**	238.7	1	1.272	IDENTIFIED	3.794	☐	
Lead-214 ✓	**1.024**	0.1381	pCi/g	**0.09154**	**0.100**	352.1	1	1.358	IDENTIFIED	6.286	☐	
Neptunium-236 INT	**0.0658**	0.05085	pCi/g	**0.06076**	Y	99.05	1	1.869	IDENTIFIED	39.16	☑ uI	
Neptunium-237 INT	**0.8183**	0.1794	pCi/g	**0.2019**	Y	87.15	1	1.316	IDENTIFIED	10.3	☑ uI	
Potassium-40 ✓	**5.488**	0.8775	pCi/g	**0.4292**	**1.00**	1462	1	1.951	IDENTIFIED	7.125	☐	
Protactinium-234m NNP	**6.257**	5.607	pCi/g	**5.832**	Y	1001	1	2.844	IDENTIFIED	45.53	☑ uI	
Radium-223 INT	**0.4957**	0.1926	pCi/g	**0.2139**	Y	270.3	1	1.318	IDENTIFIED	19.51	☑ uI	
Thallium-208 ✓	**0.3788**	0.06664	pCi/g	**0.0452**	**0.080**	583.5	1	1.604	IDENTIFIED	8.227	☐	
Thorium-234 ✓	**1.611**	0.4284	pCi/g	**0.4709**	**0.500**	92.71	1	1.394	IDENTIFIED	12.8	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701015	28-SEP-07 00:00	13-DEC-07 10:59	76.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.5536**	0.1429	pCi/g	**0.1028**	**0.800**	911.5	1	1.91	IDENTIFIED	12.31	☐	
Americium-243 INT	**0.1324**	0.03094	pCi/g	**0.03387**	Y	74.93	1	1.242	IDENTIFIED	10.61	☑ uI	
Bismuth-212 ✓	**0.3318**	0.2469	pCi/g	**0.2022**	**0.500**	728	1	1.945	IDENTIFIED	37.78	☐	
Bismuth-214 ✓	**0.4823**	0.07331	pCi/g	**0.05308**	**0.200**	609.5	1	1.554	IDENTIFIED	7.042	☐	
Cesium-137 ✓	**0.1013**	0.03327	pCi/g	**0.02774**	**0.100**	662.1	1	1.879	IDENTIFIED	16.41	☐	
Lead-212 ✓	**0.5531**	0.05984	pCi/g	**0.04584**	**0.100**	238.6	1	1.042	IDENTIFIED	4.688	☐	
Lead-214 ✓	**0.5266**	0.07868	pCi/g	**0.05638**	**0.100**	351.9	1	1.178	IDENTIFIED	7.101	☐	
Neptunium-237 INT	**0.3259**	0.1276	pCi/g	**0.1583**	Y	87.32	1	1.25	IDENTIFIED	19.09	☑ uI	
Potassium-40 ✓	**3.205**	0.5552	pCi/g	**0.212**	**1.00**	1462	1	2.088	IDENTIFIED	7.774	☐	
Radium-223 INT	**0.2353**	0.1305	pCi/g	**0.1507**	Y	269.9	1	1.652	IDENTIFIED	28.12	☑ uI	
Thallium-208 ✓	**0.1656**	0.03578	pCi/g	**0.02811**	**0.080**	583.5	1	1.447	IDENTIFIED	10.56	☐	
Thorium-234 ✓	**0.7391**	0.3858	pCi/g	**0.3497**	**0.500**	92.87	1	1.684	IDENTIFIED	26.08	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701016	28-SEP-07 00:00	13-DEC-07 11:15	76.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.5992**	0.1616	pCi/g	**0.114**	**0.800**	911.2	1	1.228	IDENTIFIED	13.12	☐	
Americium-243 INT	**0.1428**	0.0381	pCi/g	**0.03971**	Y	74.78	1	1.535	IDENTIFIED	13.21	☑ uI	
Bismuth-212 ✓	**0.4085**	0.2436	pCi/g	**0.2318**	**0.500**	727.1	1	1.158	IDENTIFIED	30.12	☐	
Bismuth-214 ✓	**0.4638**	0.08399	pCi/g	**0.06333**	**0.200**	609.5	1	1.781	IDENTIFIED	8.4	☐	
Lead-212 ✓	**0.687**	0.06645	pCi/g	**0.04836**	**0.100**	238.7	1	1.155	IDENTIFIED	4.064	☐	

Lead-214 ✓	**0.4703**	0.07677	pCi/g	**0.05904**	**0.100**	352.1	1	1.229	IDENTIFIED	7.908	☐	
Neptunium-237 INT	**0.3958**	0.1414	pCi/g	**0.1744**	**Y**	87.3	1	1.252	IDENTIFIED	17.85	☑ ✓ UI	
Potassium-40 ✓	**6.165**	0.7437	pCi/g	**0.2951**	**1.00**	1461	1	2.725	IDENTIFIED	5.354	☐	
Radium-223 INT	**0.4148**	0.1682	pCi/g	**0.1466**	**Y**	270	1	1.862	IDENTIFIED	20.5	☑ ✓ UI	
Thallium-208 ✓	**0.2329**	0.0485	pCi/g	**0.03021**	**0.080**	583.5	1	1.774	IDENTIFIED	9.968	☐	
Thorium-234 ✓	**1.022**	0.3705	pCi/g	**0.3833**	**0.500**	92.77	1	1.457	IDENTIFIED	18.14	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473840		13-DEC-07 12:52	0	MB	LOAD	1		GEL	N	RGSP

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473841	18-OCT-07 00:00	13-DEC-07 12:53	56.5	DUP	LOAD	1		SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb	Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.6071**	0.168	pCi/g	**0.1292**	**0.800**	910.9	1	1.288	IDENTIFIED		13.54	☐	
Americium-243 INT	**0.1143**	0.03745	pCi/g	**0.04327**	**Y**	74.89	1	0.9789	IDENTIFIED		16.33	☑ ✓ UI	
Bismuth-214 ✓	**0.3556**	0.1006	pCi/g	**0.07891**	**0.200**	609.5	1	1.599	IDENTIFIED		14.13	☐	
Cesium-137 ✓	**0.1188**	0.03659	pCi/g	**0.04046**	**0.100**	661.5	1	1.794	IDENTIFIED		15.43	☐	
Cobalt-60 LA	**0.07021**	0.02036	pCi/g	**0.0471**	**0.100**	1461	2	2.293	NOT_IDENTI		7.634	☑ UI	Data rejected due to low abundance.
Lead-212 ✓	**0.5464**	0.06754	pCi/g	**0.05807**	**0.100**	238.7	1	0.9653	IDENTIFIED		5.641	☐	
Lead-214 ✓	**0.4219**	0.08777	pCi/g	**0.07456**	**0.100**	351.9	1	1.052	IDENTIFIED		10.27	☐	
Neptunium-237 INT	**0.3858**	0.1703	pCi/g	**0.2122**	**Y**	87.14	1	1.109	IDENTIFIED		22.21	☑ ✓ UI	
Potassium-40 ✓	**4.302**	0.7105	pCi/g	**0.3692**	**1.00**	1461	2	2.293	IDENTIFIED		7.634	☐	
Radium-223 INT	**0.2059**	0.1603	pCi/g	**0.1809**	**Y**	270.2	1	1.338	IDENTIFIED		39.61	☑ ✓ UI	
Thallium-208 ✓	**0.16**	0.04097	pCi/g	**0.03437**	**0.080**	583.3	1	2.024	IDENTIFIED		12.75	☐	
Thorium-234 LA	**0.6279**	0.5184	pCi/g	**0.6071**	**0.500**	92.88	1	1.321	FAIL_ABUND		41.97	☑ UI	Data rejected due to low abundance.

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473842		14-DEC-07 04:50	0	LCS	LOAD	1		GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb	Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228	**1.077**	0.7099	pCi/g	**1.009**	**0.800**	911.7	1	1.175	FAIL_ABUND		33.33	☐	
Americium-241	**14.96**	1.185	pCi/g	**0.3146**	**0.200**	59.33	1	1.126	IDENTIFIED		1.467	☐	
Americium-243	**0.577**	0.1492	pCi/g	**0.1501**	**Y**	76.15	1	1.004	IDENTIFIED		12.54	☐	
Bismuth-214	**1.001**	0.3363	pCi/g	**0.4103**	**0.200**	609.5	1	1.761	FAIL_ABUND		16.73	☐	
Cesium-137	**6.064**	0.5861	pCi/g	**0.1687**	**0.100**	661.8	1	1.503	IDENTIFIED		2.766	☐	
Cobalt-60	**8.869**	0.6321	pCi/g	**0.1785**	**0.100**	1174	1	1.935	IDENTIFIED		2.371	☐	
Gross Gamma	**43.13**	5.76	pCi/g	**9.526**	**N**		0					☐	
Lead-212	**1.239**	0.1985	pCi/g	**0.2093**	**0.100**	238.7	1	1.374	IDENTIFIED		7.01	☐	
Lead-214	**0.9987**	0.2589	pCi/g	**0.2843**	**0.100**	351.8	1	1.393	IDENTIFIED		12.93	☐	
Neptunium-237	**35.86**	3.308	pCi/g	**0.8723**	**Y**	87.94	1	1.151	IDENTIFIED		1.673	☐	
Polonium-209	**261.2**	46.79	pCi/g	**45.24**	**Y**	898.4	1	1.694	IDENTIFIED		7.863	☐	
Potassium-40	**1.287**	0.8182	pCi/g	**1.013**	**1.00**	1462	1	2.942	IDENTIFIED		32.19	☐	
Thallium-208	**0.355**	0.1493	pCi/g	**0.1522**	**0.080**	583.5	1	1.437	IDENTIFIED		21.15	☐	

*** = Number of isotopes identified with a keyline at this energy.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:46:49.54

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198689011.CNF;1
Sample date      : 18-OCT-2007 00:00:00 Acquisition date : 12-DEC-2007 12:21:32
Sample ID        : G198689011           Sample quantity  : 1.03210E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:04.65  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           :
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.68*	29	307	0.94	93.86	90	8	2.01E-03	126.5	
2	0	53.20*	37	171	1.31	106.89	105	5	2.54E-03	66.7	
3	0	63.44*	86	474	0.88	127.34	123	9	6.00E-03	54.5	
4	1	74.87*	268	304	0.98	150.18	143	20	1.86E-02	13.0	2.07E+00
5	1	77.19*	375	302	0.98	154.82	143	20	2.61E-02	9.8	
6	2	84.23*	50	320	1.10	168.89	162	31	3.48E-03	66.0	1.96E+00
7	2	87.27*	166	308	1.11	174.96	162	31	1.15E-02	20.0	
8	2	89.90	115	212	0.86	180.21	162	31	7.96E-03	21.1	
9	2	92.72*	162	240	1.04	185.85	162	31	1.13E-02	24.4	
10	0	129.13	55	242	0.65	258.61	255	7	3.78E-03	49.2	
11	0	143.72*	21	183	0.73	287.77	285	6	1.43E-03	128.4	
12	0	163.55*	45	206	1.94	327.38	324	8	3.15E-03	62.0	
13	1	184.27*	22	126	1.16	368.79	366	12	1.51E-03	94.2	9.16E+00
14	1	185.94*	154	183	1.16	372.13	366	12	1.07E-02	19.6	
15	0	205.51*	48	150	1.31	411.24	408	7	3.33E-03	49.4	
16	0	223.43	49	111	2.30	447.04	445	7	3.41E-03	38.8	
17	5	238.73*	572	137	1.03	477.61	473	17	3.97E-02	5.9	8.49E-01
18	5	241.61	137	226	1.74	483.37	473	17	9.50E-03	26.3	
19	3	267.45	42	38	1.15	535.00	534	16	2.93E-03	22.5	2.14E+00
20	3	270.40	89	119	1.54	540.89	534	16	6.16E-03	24.7	
21	10	277.90	25	149	2.28	555.88	552	15	1.76E-03	84.4	2.99E+00
22	10	279.20	28	142	1.41	558.48	552	15	1.93E-03	77.2	
23	0	295.18*	128	199	1.17	590.43	585	12	8.88E-03	25.2	
24	0	300.65	47	161	0.67	601.34	597	10	3.27E-03	52.6	
25	0	327.59	50	176	1.80	655.18	649	12	3.45E-03	55.4	
26	0	338.32*	86	167	1.22	676.62	673	9	6.01E-03	31.7	
27	1	352.04*	253	67	1.11	704.05	699	10	1.76E-02	9.6	2.39E+00
28	0	463.30	73	115	1.24	926.39	919	14	5.07E-03	33.4	
29	0	510.98*	64	152	2.32	1021.69	1014	16	4.45E-03	56.8	
30	0	583.41*	128	64	1.20	1166.44	1162	8	8.90E-03	15.3	
31	0	588.41	27	52	0.65	1176.44	1172	8	1.87E-03	51.3	
32	0	609.27*	182	75	1.28	1218.13	1212	13	1.26E-02	13.9	
33	0	662.15*	93	74	1.36	1323.82	1319	11	6.45E-03	22.3	
34	0	747.37	14	58	3.30	1494.16	1487	10	9.51E-04	110.4	
35	0	768.32	55	46	3.43	1536.03	1531	11	3.84E-03	27.4	
36	0	796.03	8	48	0.67	1591.43	1586	9	5.28E-04	164.8	
37	0	808.25	20	41	0.99	1615.85	1611	9	1.35E-03	63.0	
38	0	876.11	35	39	6.33	1751.49	1744	17	2.42E-03	44.1	

Sample ID : G198689011 Acquisition date : 12-DEC-2007 12:21:32

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	911.58*	111	62	1.83	1822.39	1816	13	7.71E-03	18.9	
40	0	927.84	24	49	4.72	1854.89	1846	14	1.69E-03	64.3	
41	0	964.60	37	30	1.91	1928.38	1923	10	2.57E-03	32.2	
42	0	968.89*	71	24	1.19	1936.96	1933	10	4.91E-03	19.7	
43	0	1014.96*	14	10	2.44	2029.05	2024	10	9.87E-04	60.5	
44	0	1099.79	8	21	0.70	2198.63	2196	6	5.56E-04	97.2	
45	0	1120.85*	46	41	2.06	2240.72	2235	13	3.21E-03	36.4	
46	0	1156.51	20	26	1.78	2312.03	2306	9	1.42E-03	50.7	
47	0	1203.88	59	22	5.26	2406.72	2395	22	4.12E-03	24.0	
48	0	1239.64	15	32	0.91	2478.21	2470	11	1.01E-03	80.8	
49	0	1249.15	27	21	3.25	2497.23	2492	11	1.85E-03	39.0	
50	0	1378.21	25	21	2.70	2755.26	2746	15	1.71E-03	46.4	
51	0	1460.57*	217	9	1.97	2919.92	2910	16	1.51E-02	8.1	
52	0	1655.27	15	3	0.61	3309.23	3303	11	1.05E-03	33.3	
53	0	1691.47	16	3	4.64	3381.63	3376	12	1.10E-03	33.5	
54	0	1764.43*	14	12	1.63	3527.53	3521	12	9.81E-04	68.6	
55	0	1839.53	15	3	0.99	3677.71	3671	12	1.06E-03	33.9	
56	0	1942.30	9	0	1.19	3883.22	3879	8	6.25E-04	33.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198689011       *
* Acquisition date : 12-DEC-2007 12:21:32 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:04.65     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 18-OCT-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198689011           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0321E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.146E+00	6.912E-01	4.349E-01	0.000E+00
CS-137	1.114E-01	4.929E-02	4.354E-02	0.000E+00
TL-208	1.370E-01	4.214E-02	4.418E-02	0.000E+00
PB-212	5.434E-01	7.584E-02	5.680E-02	0.000E+00
BI-214	3.703E-01	1.038E-01	8.309E-02	0.000E+00
PB-214	3.809E-01	7.564E-02	7.048E-02	0.000E+00
RA-223	2.935E-01	1.437E-01	1.709E-01	0.000E+00
AC-228	5.866E-01	2.203E-01	1.633E-01	0.000E+00
TH-234	7.807E-01	3.773E-01	3.478E-01	0.000E+00
U-235	5.622E-02	1.416E-01	1.849E-01	0.000E+00
NP-237	3.458E-01	1.376E-01	1.495E-01	0.000E+00
AM-243	1.008E-01	2.639E-02	3.064E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	7.090E-03		3.120E-02	5.259E-02	0.000E+00	NOT IDENT.
RH-101	-1.345E-02		2.172E-02	3.146E-02	0.000E+00	NOT IDENT.
SB-125	1.774E-02		6.333E-02	1.087E-01	0.000E+00	NOT IDENT.
EU-155	4.358E-02		5.862E-02	9.431E-02	0.000E+00	NOT IDENT.
PO-209	1.820E+00		5.701E+00	9.871E+00	0.000E+00	NOT IDENT.
BI-211	-7.377E-01		8.060E-01	1.250E+00	0.000E+00	NOT IDENT.
BI-212	2.738E-01		2.291E-01	4.227E-01	0.000E+00	NOT IDENT.
PA-233	-1.553E-02		3.809E-02	6.390E-02	0.000E+00	NOT IDENT.
PA-234M	-1.633E+00		3.981E+00	5.786E+00	0.000E+00	NOT IDENT.
NP-236	1.677E-02		3.441E-02	5.001E-02	0.000E+00	NOT IDENT.
NP-239	1.134E-01		1.471E-01	2.264E-01	0.000E+00	NOT IDENT.
AM-241	1.711E-02		3.280E-02	5.317E-02	0.000E+00	NOT IDENT.
CM-243	-5.424E-02		5.209E-02	7.635E-02	0.000E+00	NOT IDENT.
AM-246	2.247E-02		9.499E-02	1.617E-01	0.000E+00	NOT IDENT.
CF-249	-1.853E-04		2.600E-02	4.408E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:46:51.44

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198689011.CNF;1
Sample date      : 18-OCT-2007 00:00:00 Acquisition date : 12-DEC-2007 12:21:32
Sample ID        : G198689011           Sample quantity  : 1.03210E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:04.65  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           :
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	217	10.66*	8.925E-01	4.146E+00	4.146E+00	17.01
CS-137	661.66	93	85.10*	1.789E+00	1.110E-01	1.114E-01	45.17
TL-208	277.36	25	6.31	3.926E+00	1.859E-01	1.859E-01	168.97
	510.77	64	22.60	2.281E+00	2.259E-01	2.259E-01	113.78
	583.19	128	84.50*	2.014E+00	1.370E-01	1.370E-01	31.40
	763.13	------	1.81	1.568E+00	------	Line Not Found	------
	860.56	------	12.42	1.404E+00	------	Line Not Found	------
PB-212	74.81	268	10.40	7.088E+00	6.607E-01	6.607E-01	26.73
	77.11	375	17.50	7.087E+00	5.500E-01	5.500E-01	20.59
	87.30	166	7.81	7.032E+00	5.490E-01	5.490E-01	40.60
	238.63	572	43.30*	4.423E+00	5.434E-01	5.434E-01	14.24
	300.09	47	3.28	3.678E+00	7.101E-01	7.101E-01	105.48
BI-214	609.31	182	46.10*	1.934E+00	3.703E-01	3.703E-01	28.61
	768.36	55	4.94	1.558E+00	1.307E+00	1.307E+00	55.28
	806.17	------	1.22	1.490E+00	------	Line Not Found	------
	934.06	------	3.03	1.304E+00	------	Line Not Found	------
	1120.29	46	15.10	1.112E+00	5.010E-01	5.011E-01	72.98
	1155.19	20	1.63	1.082E+00	2.102E+00	2.102E+00	101.51
	1238.11	15	5.79	1.021E+00	4.471E-01	4.471E-01	161.63
	1280.96	------	1.43	9.933E-01	------	Line Not Found	------
	1377.67	25	4.00	9.353E-01	1.195E+00	1.195E+00	93.03
	1401.50	------	1.27	9.227E-01	------	Line Not Found	------
	1407.98	------	2.15	9.193E-01	------	Line Not Found	------
	1509.23	------	2.11	8.695E-01	------	Line Not Found	------
	1729.60	------	2.92	7.820E-01	------	Line Not Found	------
	1764.49	14	15.40	7.702E-01	2.165E-01	2.165E-01	137.24
PB-214	74.81	268	6.44	7.088E+00	1.067E+00	1.067E+00	26.73
	77.11	375	10.80	7.087E+00	8.913E-01	8.913E-01	20.59
	87.30	166	4.84	7.032E+00	8.859E-01	8.859E-01	40.60
	242.00	137	7.43	4.383E+00	7.638E-01	7.639E-01	53.13
	295.22	128	19.30	3.735E+00	3.226E-01	3.226E-01	50.96
	351.93	253	37.60*	3.210E+00	3.809E-01	3.809E-01	20.26

Sample ID : G198689011 Acquisition date : 12-DEC-2007 12:21:32

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
RA-223	269.46	89	13.70*	4.014E+00	2.935E-01	2.935E-01	49.95
AC-228	129.07	55	2.42	6.356E+00	6.443E-01	6.443E-01	98.87
	209.25	------	3.89	4.865E+00	------	Line Not Found	------
	270.25	89	3.46	4.014E+00	1.162E+00	1.162E+00	49.95
	338.32	86	11.27	3.324E+00	4.198E-01	4.198E-01	63.80
	409.46	------	1.92	2.802E+00	------	Line Not Found	------
	463.00	73	4.40	2.500E+00	1.206E+00	1.206E+00	67.00
	794.95	8	4.25	1.508E+00	2.159E-01	2.159E-01	329.77
	911.20	111	25.80*	1.333E+00	5.866E-01	5.866E-01	38.33
	964.77	37	4.99	1.268E+00	1.064E+00	1.064E+00	64.75
	968.97	71	15.80	1.263E+00	6.447E-01	6.447E-01	39.94
	1588.20	------	3.22	8.353E-01	------	Line Not Found	------
TH-234	63.29	86	4.80	7.002E+00	4.676E-01	4.676E-01	109.15
	92.58	162	5.41*	6.976E+00	7.807E-01	7.807E-01	49.31
U-235	143.76	21	10.96*	6.066E+00	5.622E-02	5.622E-02	257.00
NP-237	86.48	166	12.40*	7.032E+00	3.458E-01	3.458E-01	40.60
AM-243	74.66	268	68.20*	7.088E+00	1.008E-01	1.008E-01	26.73

Flag: "*" = Keyline

Sample ID : G198689011 Acquisition date : 12-DEC-2007 12:21:32

Total number of lines in spectrum	56	
Number of unidentified lines	25	
Number of lines tentatively identified by NID	31	55.36%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.146E+00	4.146E+00	0.705E+00	17.01	
CS-137	9.47E+08S	1.00	1.110E-01	1.114E-01	0.503E-01	45.17	
TL-208	4.43E+17S	1.00	1.370E-01	1.370E-01	0.430E-01	31.40	
PB-212	4.43E+17S	1.00	5.434E-01	5.434E-01	0.774E-01	14.24	
BI-214	5.05E+10S	1.00	3.703E-01	3.703E-01	1.059E-01	28.61	
PB-214	5.05E+10S	1.00	3.809E-01	3.809E-01	0.772E-01	20.26	
RA-223	1.04E+12S	1.00	2.935E-01	2.935E-01	1.466E-01	49.95	
AC-228	4.43E+17S	1.00	5.866E-01	5.866E-01	2.248E-01	38.33	
TH-234	1.41E+17S	1.00	7.807E-01	7.807E-01	3.850E-01	49.31	
U-235	2.22E+16S	1.00	5.622E-02	5.622E-02	14.45E-02	257.00	
NP-237	6.75E+13S	1.00	3.458E-01	3.458E-01	1.404E-01	40.60	
AM-243	2.33E+11S	1.00	1.008E-01	1.008E-01	0.269E-01	26.73	
			---	---			
		Total Activity :	7.852E+00	7.852E+00			
		Grand Total Activity :	7.852E+00	7.852E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198689011 Acquisition date : 12-DEC-2007 12:21:32

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.68	29	307	0.94	93.86	90	8	2.01E-03	****	6.48E+00	
0	53.20	37	171	1.31	106.89	105	5	2.54E-03	****	6.76E+00	
2	84.23	50	320	1.10	168.89	162	31	3.48E-03	****	7.06E+00	
2	89.90	115	212	0.86	180.21	162	31	7.96E-03	42.2	7.01E+00	
0	163.55	45	206	1.94	327.38	324	8	3.15E-03	****	5.68E+00	
1	184.27	22	126	1.16	368.79	366	12	1.51E-03	****	5.29E+00	
1	185.94	154	183	1.16	372.13	366	12	1.07E-02	39.2	5.26E+00	
0	205.51	48	150	1.31	411.24	408	7	3.33E-03	98.8	4.93E+00	
0	223.43	49	111	2.30	447.04	445	7	3.41E-03	77.5	4.64E+00	
3	267.45	42	38	1.15	535.00	534	16	2.93E-03	44.9	4.05E+00	
10	279.20	28	142	1.41	558.48	552	15	1.93E-03	****	3.91E+00	
0	327.59	50	176	1.80	655.18	649	12	3.45E-03	****	3.42E+00	
0	588.41	27	52	0.65	1176.44	1172	8	1.87E-03	****	2.00E+00	
0	747.37	14	58	3.30	1494.16	1487	10	9.51E-04	****	1.60E+00	
0	808.25	20	41	0.99	1615.85	1611	9	1.35E-03	****	1.49E+00	
0	876.11	35	39	6.33	1751.49	1744	17	2.42E-03	88.1	1.38E+00	
0	927.84	24	49	4.72	1854.89	1846	14	1.69E-03	****	1.31E+00	
0	1014.96	14	10	2.44	2029.05	2024	10	9.87E-04	****	1.21E+00	
0	1099.79	8	21	0.70	2198.63	2196	6	5.56E-04	****	1.13E+00	
0	1203.88	59	22	5.26	2406.72	2395	22	4.12E-03	47.9	1.05E+00	
0	1249.15	27	21	3.25	2497.23	2492	11	1.85E-03	78.0	1.01E+00	
0	1655.27	15	3	0.61	3309.23	3303	11	1.05E-03	66.7	8.09E-01	
0	1691.47	16	3	4.64	3381.63	3376	12	1.10E-03	66.9	7.95E-01	
0	1839.53	15	3	0.99	3677.71	3671	12	1.06E-03	67.9	7.46E-01	
0	1942.30	9	0	1.19	3883.22	3879	8	6.25E-04	66.7	7.17E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198689011            *
* Acquisition date : 12-DEC-2007 12:21:32 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:04.65     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 18-OCT-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198689011           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0321E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.146E+00	6.912E-01	2.176E-01	6.912E-01
CS-137	1.114E-01	4.929E-02	2.178E-02	4.929E-02
TL-208	1.370E-01	4.214E-02	2.210E-02	4.214E-02
PB-212	5.434E-01	7.584E-02	2.842E-02	7.584E-02
BI-214	3.703E-01	1.038E-01	4.157E-02	1.038E-01
PB-214	3.809E-01	7.564E-02	3.526E-02	7.564E-02
RA-223	2.935E-01	1.437E-01	8.552E-02	1.437E-01
AC-228	5.866E-01	2.203E-01	8.170E-02	2.203E-01
TH-234	7.807E-01	3.773E-01	1.740E-01	3.773E-01
U-235	5.622E-02	1.416E-01	9.251E-02	1.416E-01
NP-237	3.458E-01	1.376E-01	7.482E-02	1.376E-01
AM-243	1.008E-01	2.639E-02	1.533E-02	2.639E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	7.090E-03	3.120E-02	2.631E-02	3.120E-02	NOT IDENT.
RH-101	-1.345E-02	2.172E-02	1.574E-02	2.172E-02	NOT IDENT.
SB-125	1.774E-02	6.333E-02	5.440E-02	6.333E-02	NOT IDENT.
EU-155	4.358E-02	5.862E-02	4.718E-02	5.862E-02	NOT IDENT.
PO-209	1.820E+00	5.701E+00	4.938E+00	5.701E+00	NOT IDENT.
BI-211	-7.377E-01	8.060E-01	6.253E-01	8.060E-01	NOT IDENT.
BI-212	2.738E-01	2.291E-01	2.115E-01	2.291E-01	NOT IDENT.
PA-233	-1.553E-02	3.809E-02	3.197E-02	3.809E-02	NOT IDENT.
PA-234M	-1.633E+00	3.981E+00	2.895E+00	3.981E+00	NOT IDENT.
NP-236	1.677E-02	3.441E-02	2.502E-02	3.441E-02	NOT IDENT.
NP-239	1.134E-01	1.471E-01	1.132E-01	1.471E-01	NOT IDENT.
AM-241	1.711E-02	3.280E-02	2.660E-02	3.280E-02	NOT IDENT.
CM-243	-5.424E-02	5.209E-02	3.820E-02	5.209E-02	NOT IDENT.
AM-246	2.247E-02	9.499E-02	8.088E-02	9.499E-02	NOT IDENT.
CF-249	-1.853E-04	2.600E-02	2.205E-02	2.600E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	218.6796
63.29	272.6862
74.66	303.9945
74.81	304.0945
74.81	304.0945
77.11	305.6235
77.11	305.6235
86.48	236.4535
87.30	236.8402
87.30	236.8402
92.58	239.2860
98.44	202.7668
103.76	225.8936
105.31	193.4763
129.07	210.9161
143.76	210.4849
198.00	175.9383
209.25	167.8103
228.18	142.9099
238.63	165.6735
242.00	166.2185
269.46	124.4355
270.25	124.5234
277.36	146.1951
295.22	110.2740
300.09	127.7556
312.17	120.0594
338.32	130.7568
351.93	101.6060
387.59	103.2503
409.46	99.0001
427.87	91.4240
463.00	71.5496
510.77	83.7411
583.19	79.7554
609.31	77.3416
661.66	61.6311
727.33	65.2148
763.13	64.3364
768.36	73.6816
785.37	61.1966
794.95	61.4254
806.17	68.5459
831.80	69.8411
860.56	43.8774
896.60	49.2768
911.20	44.6726
934.06	33.5583
964.77	29.6675
968.97	42.9123
1001.03	41.0270
1078.86	33.8314
1120.29	36.3262
1155.19	31.4517
1173.23	38.9891
1238.11	37.5464
1280.96	23.8702
1332.51	24.1893
1377.67	21.3126
1401.50	23.3012
1407.98	25.2048
1460.80	24.3091
1509.23	23.8993
1588.20	24.3245
1620.50	16.6569
1729.60	15.0354
1764.49	8.6523

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198689011

Total Uranium Activity	2.6015E-02	ug/g
Total Uranium Counting Unc.	6.5521E-02	ug/g
Total Uranium Tpu	6.5521E-08	ug/g
Total Uranium Mda	4.2802E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:49:23.69

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701001.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 12-DEC-2007 12:39:07
Sample ID         : G198701001           Sample quantity  : 1.04860E+02 GRAM
Detector name     : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00         Elapsed real time: 0 04:00:26.18  0.2%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708130               Detector SN#     :
Matrix Spike ID  :                       LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	47.01	77	278	2.01	93.13	88	10	5.38E-03	41.9	
2	0	58.23	34	293	0.73	115.52	112	8	2.36E-03	89.4	
3	0	63.92	58	393	1.58	126.89	122	9	4.04E-03	62.7	
4	3	74.95	402	452	1.86	148.92	143	20	2.79E-02	12.2	2.37E+00
5	3	77.24*	711	394	1.72	153.50	143	20	4.94E-02	7.0	
6	0	83.31	68	346	1.52	165.62	164	8	4.74E-03	48.2	
7	0	87.16	136	282	1.09	173.30	171	6	9.45E-03	21.3	
8	3	90.01	84	242	1.21	178.99	176	12	5.86E-03	29.3	7.86E-01
9	3	92.87*	90	284	1.08	184.70	176	12	6.24E-03	34.1	
10	0	185.84*	179	238	1.23	370.40	366	9	1.25E-02	18.8	
11	0	209.62	79	321	1.32	417.90	410	14	5.46E-03	49.9	
12	2	238.53*	663	159	1.40	475.66	469	20	4.60E-02	5.4	8.35E-01
13	2	241.51	211	200	1.91	481.62	469	20	1.47E-02	17.7	
14	0	270.06	108	177	1.54	538.65	533	13	7.53E-03	27.0	
15	0	277.91	57	202	0.87	554.34	549	12	3.96E-03	51.7	
16	3	295.12*	238	128	1.48	588.71	580	24	1.65E-02	11.9	1.20E+00
17	3	299.32	52	187	2.16	597.11	580	24	3.61E-03	56.2	
18	0	305.47	36	96	1.02	609.40	606	8	2.47E-03	50.7	
19	0	328.17	79	147	0.69	654.74	650	12	5.47E-03	33.0	
20	0	338.51	138	171	1.12	675.40	670	12	9.60E-03	20.7	
21	0	351.95*	312	159	1.56	702.27	697	13	2.17E-02	10.7	
22	0	462.88	70	105	2.77	923.93	915	15	4.87E-03	34.0	
23	0	474.81	37	81	3.36	947.79	938	13	2.60E-03	52.9	
24	0	477.65	17	39	1.27	953.45	950	7	1.17E-03	66.2	
25	0	510.85*	67	109	2.53	1019.80	1013	15	4.62E-03	47.9	
26	0	567.59	55	60	2.06	1133.22	1127	14	3.82E-03	32.6	
27	0	583.47*	165	74	1.55	1164.97	1159	15	1.15E-02	14.4	
28	0	609.37*	197	108	1.51	1216.74	1211	14	1.37E-02	14.3	
29	0	661.81	175	109	1.40	1321.57	1314	16	1.21E-02	15.3	
30	0	727.98	29	58	1.63	1453.88	1447	14	2.00E-03	59.5	
31	0	768.55	39	48	4.00	1535.00	1527	16	2.71E-03	42.8	
32	0	795.72	19	39	1.28	1589.32	1583	11	1.28E-03	69.0	
33	0	834.71	15	26	0.93	1667.30	1663	7	1.03E-03	62.6	
34	0	860.46	30	14	1.58	1718.79	1715	8	2.07E-03	28.5	
35	0	910.71	94	41	1.41	1819.29	1812	15	6.51E-03	18.2	
36	0	964.09	16	29	0.95	1926.06	1920	9	1.09E-03	67.0	
37	0	968.92	59	47	1.80	1935.73	1930	11	4.11E-03	25.9	
38	0	996.78	13	24	0.98	1991.46	1986	12	9.03E-04	80.3	

Sample ID : G198701001 Acquisition date : 12-DEC-2007 12:39:07

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1057.64	21	9	1.56	2113.21	2109	9	1.48E-03	35.0	
40	0	1065.64	25	26	6.18	2129.20	2121	17	1.70E-03	51.4	
41	0	1120.97*	42	39	1.58	2239.92	2235	15	2.92E-03	39.1	
42	0	1237.23	34	32	2.22	2472.57	2464	18	2.38E-03	42.1	
43	0	1378.40*	33	5	0.55	2755.12	2745	19	2.31E-03	26.2	
44	0	1429.85	11	4	1.75	2858.12	2854	8	7.96E-04	41.8	
45	0	1449.41	10	7	1.66	2897.27	2892	9	7.19E-04	54.8	
46	0	1460.72*	150	17	2.08	2919.91	2914	17	1.04E-02	11.5	
47	0	1509.01	16	10	0.95	3016.59	3008	13	1.12E-03	46.9	
48	0	1588.42	12	13	0.72	3175.61	3167	13	8.57E-04	66.5	
49	0	1611.97	13	8	2.44	3222.77	3212	15	8.93E-04	54.5	
50	0	1763.69	53	0	2.45	3526.64	3520	13	3.68E-03	13.7	
51	0	1873.27	9	7	1.48	3746.18	3740	10	6.08E-04	67.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701001       *
* Acquisition date : 12-DEC-2007 12:39:07 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:26.18     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701001           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0486E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.381E+00	7.816E-01	4.971E-01	0.000E+00
CS-137	2.249E-01	6.991E-02	4.857E-02	0.000E+00
TL-208	1.869E-01	5.436E-02	3.651E-02	0.000E+00
BI-212	2.947E-01	3.447E-01	3.482E-01	0.000E+00
PB-212	5.820E-01	7.084E-02	5.852E-02	0.000E+00
BI-214	4.273E-01	1.238E-01	9.204E-02	0.000E+00
PB-214	4.633E-01	1.001E-01	8.180E-02	0.000E+00
RA-223	3.384E-01	1.798E-01	1.857E-01	0.000E+00
AC-228	5.501E-01	1.992E-01	1.635E-01	0.000E+00
TH-234	3.523E-01	2.367E-01	3.067E-01	0.000E+00
NP-237	2.301E-01	9.738E-02	1.760E-01	0.000E+00
AM-241	2.025E-02	3.549E-02	5.415E-02	0.000E+00
AM-243	1.220E-01	3.029E-02	2.822E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	2.699E-02	3.428E-02	6.161E-02	0.000E+00	NOT IDENT.
RH-101	-8.897E-03	2.195E-02	3.369E-02	0.000E+00	NOT IDENT.
SB-125	-1.989E-02	6.924E-02	1.130E-01	0.000E+00	NOT IDENT.
EU-155	3.510E-02	5.303E-02	9.003E-02	0.000E+00	NOT IDENT.
PO-209	2.204E+00	5.575E+00	9.751E+00	0.000E+00	NOT IDENT.
BI-211	4.227E-01	9.438E-01	1.453E+00	0.000E+00	NOT IDENT.
PA-233	-3.113E-02	4.553E-02	7.169E-02	0.000E+00	NOT IDENT.
PA-234M	3.309E-01	3.772E+00	5.489E+00	0.000E+00	NOT IDENT.
U-235	1.028E-01	1.154E-01	1.958E-01	0.000E+00	NOT IDENT.
NP-236	-6.314E-03	2.740E-02	4.497E-02	0.000E+00	NOT IDENT.
NP-239	-8.381E-02	1.394E-01	2.315E-01	0.000E+00	NOT IDENT.
CM-243	4.593E-02	4.750E-02	8.152E-02	0.000E+00	NOT IDENT.
AM-246	-5.808E-03	1.061E-01	1.753E-01	0.000E+00	NOT IDENT.
CF-249	1.670E-02	2.969E-02	5.131E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:49:24.64

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701001.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 12-DEC-2007 12:39:07
Sample ID        : G198701001           Sample quantity  : 1.04860E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:26.18  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	150	10.66*	7.434E-01	3.381E+00	3.381E+00	23.59
CS-137	661.66	175	85.10*	1.641E+00	2.238E-01	2.249E-01	31.72
TL-208	277.36	57	6.31	4.072E+00	3.975E-01	3.974E-01	103.59
	510.77	67	22.60	2.159E+00	2.442E-01	2.442E-01	96.06
	583.19	165	84.50*	1.874E+00	1.869E-01	1.869E-01	29.68
	763.13	------	1.81	1.415E+00	------	Line Not Found	------
	860.56	30	12.42	1.251E+00	3.433E-01	3.433E-01	57.38
BI-212	727.33	29	11.80*	1.486E+00	2.947E-01	2.947E-01	119.34
	785.37	------	1.10	1.374E+00	------	Line Not Found	------
	1620.50	------	1.49	6.722E-01	------	Line Not Found	------
PB-212	74.81	402	10.40	8.644E+00	7.997E-01	7.997E-01	25.34
	77.11	711	17.50	8.639E+00	8.421E-01	8.421E-01	15.71
	87.30	136	7.81	8.539E+00	3.654E-01	3.654E-01	43.18
	238.63	663	43.30*	4.710E+00	5.820E-01	5.820E-01	12.42
	300.09	52	3.28	3.783E+00	7.491E-01	7.491E-01	112.62
BI-214	609.31	197	46.10*	1.790E+00	4.273E-01	4.273E-01	29.56
	768.36	39	4.94	1.405E+00	1.006E+00	1.006E+00	86.02
	806.17	------	1.22	1.337E+00	------	Line Not Found	------
	934.06	------	3.03	1.152E+00	------	Line Not Found	------
	1120.29	42	15.10	9.614E-01	5.187E-01	5.188E-01	78.33
	1155.19	------	1.63	9.335E-01	------	Line Not Found	------
	1238.11	34	5.79	8.731E-01	1.212E+00	1.212E+00	84.42
	1280.96	------	1.43	8.442E-01	------	Line Not Found	------
	1377.67	33	4.00	7.863E-01	1.897E+00	1.897E+00	52.78
	1401.50	------	1.27	7.738E-01	------	Line Not Found	------
	1407.98	------	2.15	7.704E-01	------	Line Not Found	------
	1509.23	16	2.11	7.204E-01	1.907E+00	1.907E+00	93.98
	1729.60	------	2.92	6.308E-01	------	Line Not Found	------
	1764.49	53	15.40	6.188E-01	9.955E-01	9.956E-01	28.05
PB-214	74.81	402	6.44	8.644E+00	1.292E+00	1.292E+00	25.34
	77.11	711	10.80	8.639E+00	1.364E+00	1.365E+00	15.71
	87.30	136	4.84	8.539E+00	5.896E-01	5.896E-01	43.18

Sample ID : G198701001 Acquisition date : 12-DEC-2007 12:39:07

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	211	7.43	4.656E+00	1.092E+00	1.092E+00	35.83
	295.22	238	19.30	3.837E+00	5.761E-01	5.761E-01	24.37
	351.93	312	37.60*	3.205E+00	4.633E-01	4.633E-01	22.04
RA-223	269.46	108	13.70*	4.187E+00	3.384E-01	3.384E-01	54.20
AC-228	129.07	------	2.42	7.445E+00	------	Line Not Found	------
	209.25	79	3.89	5.285E+00	6.845E-01	6.845E-01	100.01
	270.25	108	3.46	4.187E+00	1.340E+00	1.340E+00	54.20
	338.32	138	11.27	3.337E+00	6.581E-01	6.581E-01	41.79
	409.46	------	1.92	2.733E+00	------	Line Not Found	------
	463.00	70	4.40	2.399E+00	1.190E+00	1.190E+00	68.22
	794.95	19	4.25	1.355E+00	5.749E-01	5.749E-01	138.18
	911.20	94	25.80*	1.182E+00	5.501E-01	5.501E-01	36.96
	964.77	16	4.99	1.116E+00	5.046E-01	5.046E-01	134.26
	968.97	59	15.80	1.110E+00	6.036E-01	6.036E-01	52.20
	1588.20	12	3.22	6.854E-01	1.001E+00	1.001E+00	133.03
TH-234	63.29	58	4.80	8.529E+00	2.545E-01	2.545E-01	125.55
	92.58	90	5.41*	8.436E+00	3.523E-01	3.523E-01	68.56
NP-237	86.48	136	12.40*	8.539E+00	2.301E-01	2.301E-01	43.18
AM-241	59.54	34	35.90*	8.355E+00	2.024E-02	2.025E-02	178.86
AM-243	74.66	402	68.20*	8.644E+00	1.220E-01	1.220E-01	25.34

Flag: "*" = Keyline

Sample ID : G198701001 Acquisition date : 12-DEC-2007 12:39:07

Total number of lines in spectrum 51
Number of unidentified lines 17
Number of lines tentatively identified by NID 34 66.67%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.381E+00	3.381E+00	0.798E+00	23.59	
CS-137	9.47E+08S	1.00	2.238E-01	2.249E-01	0.713E-01	31.72	
TL-208	4.43E+17S	1.00	1.869E-01	1.869E-01	0.555E-01	29.68	
BI-212	4.43E+17S	1.00	2.947E-01	2.947E-01	3.517E-01	119.34	
PB-212	4.43E+17S	1.00	5.820E-01	5.820E-01	0.723E-01	12.42	
BI-214	5.05E+10S	1.00	4.273E-01	4.273E-01	1.263E-01	29.56	
PB-214	5.05E+10S	1.00	4.633E-01	4.633E-01	1.021E-01	22.04	
RA-223	1.04E+12S	1.00	3.384E-01	3.384E-01	1.834E-01	54.20	
AC-228	4.43E+17S	1.00	5.501E-01	5.501E-01	2.033E-01	36.96	
TH-234	1.41E+17S	1.00	3.523E-01	3.523E-01	2.415E-01	68.56	
NP-237	6.75E+13S	1.00	2.301E-01	2.301E-01	0.994E-01	43.18	
AM-241	1.36E+10S	1.00	2.024E-02	2.025E-02	3.622E-02	178.86	
AM-243	2.33E+11S	1.00	1.220E-01	1.220E-01	0.309E-01	25.34	
			---	---			
	Total Activity :		7.172E+00	7.173E+00			

Grand Total Activity : 7.172E+00 7.173E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701001 Acquisition date : 12-DEC-2007 12:39:07

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	47.01	77	278	2.01	93.13	88	10	5.38E-03	83.9	7.69E+00	
0	83.31	68	346	1.52	165.62	164	8	4.74E-03	96.3	8.59E+00	
3	90.01	84	242	1.21	178.99	176	12	5.86E-03	58.7	8.49E+00	
0	185.84	179	238	1.23	370.40	366	9	1.25E-02	37.6	5.84E+00	
0	305.47	36	96	1.02	609.40	606	8	2.47E-03	****	3.71E+00	
0	328.17	79	147	0.69	654.74	650	12	5.47E-03	66.0	3.45E+00	
0	474.81	37	81	3.36	947.79	938	13	2.60E-03	****	2.33E+00	
0	477.65	17	39	1.27	953.45	950	7	1.17E-03	****	2.32E+00	
0	567.59	55	60	2.06	1133.22	1127	14	3.82E-03	65.3	1.93E+00	
0	834.71	15	26	0.93	1667.30	1663	7	1.03E-03	****	1.29E+00	
0	996.78	13	24	0.98	1991.46	1986	12	9.03E-04	****	1.08E+00	
0	1057.64	21	9	1.56	2113.21	2109	9	1.48E-03	70.0	1.02E+00	
0	1065.64	25	26	6.18	2129.20	2121	17	1.70E-03	****	1.01E+00	
0	1429.85	11	4	1.75	2858.12	2854	8	7.96E-04	83.6	7.59E-01	
0	1449.41	10	7	1.66	2897.27	2892	9	7.19E-04	****	7.49E-01	
0	1611.97	13	8	2.44	3222.77	3212	15	8.93E-04	****	6.76E-01	
0	1873.27	9	7	1.48	3746.18	3740	10	6.08E-04	****	5.83E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701001            *
* Acquisition date : 12-DEC-2007 12:39:07 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:26.18     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701001           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0486E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.381E+00	7.816E-01	2.487E-01	7.816E-01
CS-137	2.249E-01	6.991E-02	2.430E-02	6.991E-02
TL-208	1.869E-01	5.436E-02	1.826E-02	5.436E-02
BI-212	2.947E-01	3.447E-01	1.742E-01	3.447E-01
PB-212	5.820E-01	7.084E-02	2.928E-02	7.084E-02
BI-214	4.273E-01	1.238E-01	4.604E-02	1.238E-01
PB-214	4.633E-01	1.001E-01	4.093E-02	1.001E-01
RA-223	3.384E-01	1.798E-01	9.291E-02	1.798E-01
AC-228	5.501E-01	1.992E-01	8.181E-02	1.992E-01
TH-234	3.523E-01	2.367E-01	1.534E-01	2.367E-01
NP-237	2.301E-01	9.738E-02	8.805E-02	9.738E-02
AM-241	2.025E-02	3.549E-02	2.709E-02	3.549E-02
AM-243	1.220E-01	3.029E-02	1.412E-02	3.029E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.699E-02	3.428E-02	3.083E-02	3.427E-02	NOT IDENT.
RH-101	-8.897E-03	2.195E-02	1.686E-02	2.195E-02	NOT IDENT.
SB-125	-1.989E-02	6.924E-02	5.652E-02	6.924E-02	NOT IDENT.
EU-155	3.510E-02	5.303E-02	4.504E-02	5.303E-02	NOT IDENT.
PO-209	2.204E+00	5.575E+00	4.878E+00	5.575E+00	NOT IDENT.
BI-211	4.227E-01	9.438E-01	7.271E-01	9.438E-01	NOT IDENT.
PA-233	-3.113E-02	4.553E-02	3.587E-02	4.553E-02	NOT IDENT.
PA-234M	3.309E-01	3.772E+00	2.746E+00	3.772E+00	NOT IDENT.
U-235	1.028E-01	1.154E-01	9.798E-02	1.154E-01	NOT IDENT.
NP-236	-6.314E-03	2.740E-02	2.250E-02	2.740E-02	NOT IDENT.
NP-239	-8.381E-02	1.394E-01	1.158E-01	1.394E-01	NOT IDENT.
CM-243	4.593E-02	4.750E-02	4.078E-02	4.750E-02	NOT IDENT.
AM-246	-5.808E-03	1.061E-01	8.768E-02	1.061E-01	NOT IDENT.
CF-249	1.670E-02	2.969E-02	2.567E-02	2.969E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	378.6002
63.29	365.4341
74.66	393.6049
74.81	393.6680
74.81	393.6680
77.11	394.6348
77.11	394.6348
86.48	495.9218
87.30	453.9026
87.30	453.9026
92.58	279.7039
98.44	299.0291
103.76	284.3138
105.31	292.2525
129.07	282.6584
143.76	279.1368
198.00	252.6640
209.25	228.3563
228.18	239.2555
238.63	204.7593
242.00	205.1262
269.46	164.1738
270.25	164.2365
277.36	173.2324
295.22	144.2079
300.09	136.1958
312.17	169.5565
338.32	151.3957
351.93	140.3270
387.59	121.1631
409.46	101.8237
427.87	108.6759
463.00	89.2880
510.77	78.0780
583.19	48.5673
609.31	83.7450
661.66	66.2271
727.33	54.2889
763.13	43.7187
768.36	44.4517
785.37	44.6372
794.95	54.2609
806.17	50.5900
831.80	46.0967
860.56	44.4717
896.60	37.0375
911.20	36.1795
934.06	42.2564
964.77	35.6111
968.97	30.5508
1001.03	34.1727
1078.86	35.4329
1120.29	29.7405
1155.19	43.1433
1173.23	30.9192
1238.11	34.4126
1280.96	22.0638
1332.51	25.4375
1377.67	21.3574
1401.50	16.0803
1407.98	25.7559
1460.80	22.7261
1509.23	17.9911
1588.20	26.4824
1620.50	21.4906
1729.60	21.2327
1764.49	16.9708

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701001

Total Uranium Activity	4.7562E-02	ug/g
Total Uranium Counting Unc.	5.3390E-02	ug/g
Total Uranium Tpu	5.3390E-08	ug/g
Total Uranium Mda	4.5334E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:50:01.51

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701002.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 12-DEC-2007 12:39:33
Sample ID        : G198701002           Sample quantity  : 1.09880E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.39  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	56.90	55	252	0.60	113.75	111	7	3.85E-03	49.7	
2	0	63.32*	26	309	1.11	126.59	123	7	1.79E-03	129.3	
3	2	73.14	40	195	0.97	146.23	144	21	2.76E-03	51.4	1.49E+00
4	2	75.05	212	289	0.98	150.06	144	21	1.47E-02	14.5	
5	2	77.17*	322	284	0.99	154.28	144	21	2.23E-02	11.0	
6	2	79.03*	8	280	0.99	158.02	144	21	5.75E-04	384.1	
7	4	84.14*	66	331	1.22	168.23	164	27	4.55E-03	52.2	9.48E-01
8	4	87.28	165	330	1.23	174.51	164	27	1.15E-02	19.8	
9	4	89.96	108	282	0.97	179.87	164	27	7.49E-03	26.5	
10	4	92.77*	134	327	1.19	185.49	164	27	9.27E-03	28.2	
11	0	129.20	59	308	0.63	258.37	255	7	4.07E-03	51.4	
12	0	186.09*	183	395	1.42	372.17	367	10	1.27E-02	23.7	
13	0	191.37	13	223	0.90	382.72	379	6	8.83E-04	187.9	
14	0	209.75	81	335	1.11	419.49	415	10	5.65E-03	43.7	
15	2	238.65*	772	188	0.92	477.29	472	16	5.36E-02	4.8	1.33E+00
16	2	240.73	80	282	1.32	481.47	472	16	5.59E-03	47.0	
17	2	241.89	175	244	1.21	483.79	472	16	1.22E-02	17.5	
18	0	270.90	96	275	1.02	541.82	536	11	6.65E-03	35.2	
19	0	295.15*	274	247	1.12	590.33	585	11	1.90E-02	13.6	
20	0	300.08	83	119	0.81	600.19	597	6	5.75E-03	23.6	
21	0	338.13	136	190	0.96	676.31	672	9	9.42E-03	20.2	
22	0	352.02*	533	233	1.23	704.10	699	12	3.70E-02	7.5	
23	0	372.08	32	114	0.92	744.21	742	8	2.20E-03	61.2	
24	0	405.00	37	116	1.17	810.07	806	8	2.60E-03	52.5	
25	0	409.21	32	101	1.29	818.49	815	7	2.25E-03	54.4	
26	0	455.88	29	108	1.28	911.86	907	10	2.04E-03	69.2	
27	0	463.37	52	129	1.06	926.84	921	10	3.60E-03	43.4	
28	0	510.95*	98	182	1.91	1022.02	1014	16	6.84E-03	41.0	
29	0	559.20	28	87	1.95	1118.56	1110	11	1.96E-03	66.8	
30	0	569.74*	29	206	1.60	1139.65	1131	16	2.00E-03	145.3	
31	0	582.88*	259	81	1.55	1165.94	1159	13	1.80E-02	10.5	
32	0	609.11*	364	148	1.55	1218.41	1211	16	2.53E-02	9.6	
33	0	615.79*	21	84	3.83	1231.76	1226	13	1.44E-03	106.4	
34	0	661.61*	95	87	1.73	1323.44	1318	11	6.61E-03	22.6	
35	0	665.85	13	58	1.29	1331.93	1328	8	8.81E-04	106.6	
36	1	723.03*	10	88	1.78	1446.32	1440	33	6.95E-04	191.4	1.94E+00
37	1	727.38	58	78	1.79	1455.04	1440	33	4.01E-03	33.3	
38	0	748.86	40	79	2.14	1498.01	1489	15	2.80E-03	51.4	

Sample ID : G198701002 Acquisition date : 12-DEC-2007 12:39:33

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	768.02	40	52	2.00	1536.34	1532	10	2.77E-03	37.5	
40	0	795.18	36	72	0.90	1590.69	1584	10	2.52E-03	46.8	
41	0	842.35	19	62	0.52	1685.07	1681	9	1.34E-03	76.4	
42	0	860.77	41	54	1.41	1721.93	1717	10	2.85E-03	38.1	
43	0	876.78	19	53	1.87	1753.96	1744	12	1.29E-03	82.5	
44	0	885.60	14	42	0.80	1771.60	1768	8	9.94E-04	82.7	
45	0	910.99*	198	43	1.57	1822.41	1815	16	1.38E-02	10.9	
46	0	968.91	103	73	1.23	1938.30	1931	13	7.15E-03	20.1	
47	0	1063.44*	6	61	1.59	2127.46	2121	14	3.90E-04	515.7	
48	0	1093.77	22	21	2.40	2188.14	2182	12	1.51E-03	47.3	
49	0	1113.18	19	14	1.53	2226.99	2223	8	1.30E-03	41.7	
50	0	1121.07	57	63	1.50	2242.76	2235	16	3.95E-03	34.1	
51	0	1248.71	14	13	1.11	2498.19	2495	6	9.84E-04	48.5	
52	0	1378.68	15	31	2.37	2758.29	2747	14	1.01E-03	86.0	
53	0	1410.32	31	28	2.24	2821.61	2810	23	2.13E-03	48.9	
54	0	1445.75	8	22	1.02	2892.52	2883	11	5.61E-04	122.5	
55	0	1460.21*	380	10	2.08	2921.45	2911	20	2.64E-02	5.7	
56	0	1484.79	5	12	2.09	2970.65	2963	11	3.70E-04	129.1	
57	0	1559.86	23	8	5.49	3120.89	3113	16	1.60E-03	34.5	
58	0	1591.09	23	50	7.46	3183.39	3166	25	1.60E-03	85.4	
59	0	1641.66	6	12	0.52	3284.62	3276	13	4.32E-04	124.7	
60	0	1668.28	9	3	2.84	3337.90	3331	11	6.37E-04	48.3	
61	0	1703.14	6	13	0.46	3407.67	3398	13	4.17E-04	130.4	
62	0	1729.42	32	3	1.48	3460.26	3454	14	2.22E-03	21.5	
63	0	1744.98	18	4	0.73	3491.42	3485	15	1.24E-03	33.7	
64	0	1764.04	43	28	1.82	3529.56	3522	14	2.99E-03	30.2	
65	0	1846.81	13	4	1.84	3695.23	3687	13	9.33E-04	39.1	
66	0	2005.47	17	0	1.50	4012.82	4005	16	1.18E-03	24.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701002       *
* Acquisition date : 12-DEC-2007 12:39:33 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:08.39     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701002           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0988E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.871E+00	7.751E-01	3.608E-01	0.000E+00
CS-137	9.136E-02	4.077E-02	4.366E-02	0.000E+00
TL-208	2.234E-01	4.748E-02	3.788E-02	0.000E+00
BI-212	4.317E-01	2.827E-01	3.051E-01	0.000E+00
PB-212	6.392E-01	6.976E-02	6.104E-02	0.000E+00
BI-214	5.979E-01	1.172E-01	7.779E-02	0.000E+00
PB-214	6.863E-01	1.075E-01	7.182E-02	0.000E+00
RA-223	2.756E-01	1.907E-01	1.766E-01	0.000E+00
AC-228	8.308E-01	1.894E-01	1.445E-01	0.000E+00
TH-234	7.325E-01	4.079E-01	4.061E-01	0.000E+00
NP-237	4.227E-01	1.667E-01	1.900E-01	0.000E+00
AM-243	1.270E-01	3.718E-02	4.519E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	1.426E-03		2.456E-02	4.156E-02	0.000E+00	NOT IDENT.
RH-101	-1.177E-02		2.299E-02	3.295E-02	0.000E+00	NOT IDENT.
SB-125	-6.864E-02		6.251E-02	9.742E-02	0.000E+00	NOT IDENT.
EU-155	2.138E-02		5.542E-02	9.862E-02	0.000E+00	NOT IDENT.
PO-209	7.447E-01		5.096E+00	8.528E+00	0.000E+00	NOT IDENT.
BI-211	-2.024E-01		7.560E-01	1.232E+00	0.000E+00	NOT IDENT.
PA-233	-3.908E-03		4.035E-02	6.935E-02	0.000E+00	NOT IDENT.
PA-234M	-5.710E-01		3.325E+00	4.933E+00	0.000E+00	NOT IDENT.
U-235	2.752E-03		1.371E-01	2.040E-01	0.000E+00	NOT IDENT.
NP-236	-1.049E-03		3.089E-02	5.433E-02	0.000E+00	NOT IDENT.
NP-239	2.300E-02		1.378E-01	2.294E-01	0.000E+00	NOT IDENT.
AM-241	-1.752E-02		1.087E-01	1.422E-01	0.000E+00	NOT IDENT.
CM-243	3.476E-04		5.048E-02	8.862E-02	0.000E+00	NOT IDENT.
AM-246	1.219E-01		8.952E-02	1.692E-01	0.000E+00	NOT IDENT.
CF-249	-8.008E-03		2.611E-02	4.347E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:50:02.45

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701002.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 12-DEC-2007 12:39:33
Sample ID        : G198701002           Sample quantity  : 1.09880E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.39  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	380	10.66*	1.037E+00	5.871E+00	5.871E+00	13.47
CS-137	661.66	95	85.10*	2.102E+00	9.092E-02	9.136E-02	45.54
TL-208	277.36	------	6.31	4.253E+00	------	Line Not Found	------
	510.77	98	22.60	2.614E+00	2.847E-01	2.847E-01	82.12
	583.19	259	84.50*	2.342E+00	2.234E-01	2.234E-01	21.68
	763.13	------	1.81	1.854E+00	------	Line Not Found	------
	860.56	41	12.42	1.663E+00	3.395E-01	3.395E-01	76.62
BI-212	727.33	58	11.80*	1.935E+00	4.317E-01	4.317E-01	66.83
	785.37	------	1.10	1.807E+00	------	Line Not Found	------
	1620.50	------	1.49	9.597E-01	------	Line Not Found	------
PB-212	74.81	212	10.40	4.177E+00	8.327E-01	8.327E-01	29.88
	77.11	322	17.50	4.419E+00	7.103E-01	7.103E-01	23.08
	87.30	165	7.81	5.376E+00	6.712E-01	6.712E-01	40.25
	238.63	772	43.30*	4.767E+00	6.392E-01	6.392E-01	11.14
	300.09	83	3.28	4.001E+00	1.078E+00	1.078E+00	47.57
BI-214	609.31	364	46.10*	2.257E+00	5.979E-01	5.979E-01	20.00
	768.36	40	4.94	1.844E+00	7.475E-01	7.476E-01	75.28
	806.17	------	1.22	1.765E+00	------	Line Not Found	------
	934.06	------	3.03	1.544E+00	------	Line Not Found	------
	1120.29	57	15.10	1.305E+00	4.934E-01	4.934E-01	68.42
	1155.19	------	1.63	1.270E+00	------	Line Not Found	------
	1238.11	------	5.79	1.193E+00	------	Line Not Found	------
	1280.96	------	1.43	1.158E+00	------	Line Not Found	------
	1377.67	15	4.00	1.087E+00	5.707E-01	5.708E-01	172.18
	1401.50	------	1.27	1.073E+00	------	Line Not Found	------
	1407.98	------	2.15	1.069E+00	------	Line Not Found	------
	1509.23	------	2.11	1.011E+00	------	Line Not Found	------
	1729.60	32	2.92	9.197E-01	2.035E+00	2.036E+00	43.43
	1764.49	43	15.40	9.089E-01	5.248E-01	5.248E-01	60.78
PB-214	74.81	212	6.44	4.177E+00	1.345E+00	1.345E+00	29.88
	77.11	322	10.80	4.419E+00	1.151E+00	1.151E+00	23.08
	87.30	165	4.84	5.376E+00	1.083E+00	1.083E+00	40.25

Sample ID : G198701002 Acquisition date : 12-DEC-2007 12:39:33

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	175	7.43	4.719E+00	8.536E-01	8.537E-01	35.38
	295.22	274	19.30	4.053E+00	5.980E-01	5.980E-01	27.93
	351.93	533	37.60*	3.528E+00	6.863E-01	6.863E-01	15.98
RA-223	269.46	96	13.70*	4.331E+00	2.756E-01	2.756E-01	70.62
AC-228	129.07	59	2.42	6.529E+00	6.332E-01	6.332E-01	103.01
	209.25	81	3.89	5.228E+00	6.836E-01	6.835E-01	87.60
	270.25	96	3.46	4.331E+00	1.091E+00	1.091E+00	70.62
	338.32	136	11.27	3.643E+00	5.643E-01	5.643E-01	40.80
	409.46	32	1.92	3.129E+00	9.209E-01	9.209E-01	108.92
	463.00	52	4.40	2.831E+00	7.107E-01	7.107E-01	86.96
	794.95	36	4.25	1.787E+00	8.173E-01	8.173E-01	93.86
	911.20	198	25.80*	1.579E+00	8.308E-01	8.308E-01	23.26
	964.77	------	4.99	1.498E+00	------	Line Not Found	------
	968.97	103	15.80	1.492E+00	7.461E-01	7.461E-01	40.96
	1588.20	------	3.22	9.734E-01	------	Line Not Found	------
TH-234	63.29	26	4.80	2.631E+00	3.493E-01	3.493E-01	258.79
	92.58	134	5.41*	5.755E+00	7.325E-01	7.325E-01	56.82
NP-237	86.48	165	12.40*	5.376E+00	4.227E-01	4.227E-01	40.25
AM-243	74.66	212	68.20*	4.177E+00	1.270E-01	1.270E-01	29.88

Flag: "*" = Keyline

Sample ID : G198701002 Acquisition date : 12-DEC-2007 12:39:33

Total number of lines in spectrum 66
Number of unidentified lines 35
Number of lines tentatively identified by NID 31 46.97%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.871E+00	5.871E+00	0.791E+00	13.47	
CS-137	9.47E+08S	1.00	9.092E-02	9.136E-02	4.160E-02	45.54	
TL-208	4.43E+17S	1.00	2.234E-01	2.234E-01	0.484E-01	21.68	
BI-212	4.43E+17S	1.00	4.317E-01	4.317E-01	2.885E-01	66.83	
PB-212	4.43E+17S	1.00	6.392E-01	6.392E-01	0.712E-01	11.14	
BI-214	5.05E+10S	1.00	5.979E-01	5.979E-01	1.196E-01	20.00	
PB-214	5.05E+10S	1.00	6.863E-01	6.863E-01	1.097E-01	15.98	
RA-223	1.04E+12S	1.00	2.756E-01	2.756E-01	1.946E-01	70.62	
AC-228	4.43E+17S	1.00	8.308E-01	8.308E-01	1.933E-01	23.26	
TH-234	1.41E+17S	1.00	7.325E-01	7.325E-01	4.162E-01	56.82	
NP-237	6.75E+13S	1.00	4.227E-01	4.227E-01	1.701E-01	40.25	
AM-243	2.33E+11S	1.00	1.270E-01	1.270E-01	0.379E-01	29.88	
			---	---			
		Total Activity :	1.093E+01	1.093E+01			

Grand Total Activity : 1.093E+01 1.093E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701002 Acquisition date : 12-DEC-2007 12:39:33

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	56.90	55	252	0.60	113.75	111	7	3.85E-03	99.4	1.74E+00	
2	73.14	40	195	0.97	146.23	144	21	2.76E-03	****	3.95E+00	
2	79.03	8	280	0.99	158.02	144	21	5.75E-04	****	4.62E+00	
4	84.14	66	331	1.22	168.23	164	27	4.55E-03	****	5.12E+00	
4	89.96	108	282	0.97	179.87	164	27	7.49E-03	53.1	5.57E+00	
0	186.09	183	395	1.42	372.17	367	10	1.27E-02	47.4	5.65E+00	
0	191.37	13	223	0.90	382.72	379	6	8.83E-04	****	5.55E+00	
2	240.73	80	282	1.32	481.47	472	16	5.59E-03	94.1	4.74E+00	
0	372.08	32	114	0.92	744.21	742	8	2.20E-03	****	3.38E+00	
0	405.00	37	116	1.17	810.07	806	8	2.60E-03	****	3.16E+00	
0	455.88	29	108	1.28	911.86	907	10	2.04E-03	****	2.87E+00	
0	559.20	28	87	1.95	1118.56	1110	11	1.96E-03	****	2.43E+00	
0	569.74	29	206	1.60	1139.65	1131	16	2.00E-03	****	2.39E+00	
0	615.79	21	84	3.83	1231.76	1226	13	1.44E-03	****	2.24E+00	
0	665.85	13	58	1.29	1331.93	1328	8	8.81E-04	****	2.09E+00	
1	723.03	10	88	1.78	1446.32	1440	33	6.95E-04	****	1.95E+00	
0	748.86	40	79	2.14	1498.01	1489	15	2.80E-03	****	1.89E+00	
0	842.35	19	62	0.52	1685.07	1681	9	1.34E-03	****	1.70E+00	
0	876.78	19	53	1.87	1753.96	1744	12	1.29E-03	****	1.64E+00	
0	885.60	14	42	0.80	1771.60	1768	8	9.94E-04	****	1.62E+00	
0	1063.44	6	61	1.59	2127.46	2121	14	3.90E-04	****	1.37E+00	
0	1093.77	22	21	2.40	2188.14	2182	12	1.51E-03	94.6	1.33E+00	
0	1113.18	19	14	1.53	2226.99	2223	8	1.30E-03	83.4	1.31E+00	
0	1248.71	14	13	1.11	2498.19	2495	6	9.84E-04	97.0	1.18E+00	
0	1410.32	31	28	2.24	2821.61	2810	23	2.13E-03	97.8	1.07E+00	
0	1445.75	8	22	1.02	2892.52	2883	11	5.61E-04	****	1.05E+00	
0	1484.79	5	12	2.09	2970.65	2963	11	3.70E-04	****	1.02E+00	
0	1559.86	23	8	5.49	3120.89	3113	16	1.60E-03	69.0	9.86E-01	
0	1591.09	23	50	7.46	3183.39	3166	25	1.60E-03	****	9.72E-01	
0	1641.66	6	12	0.52	3284.62	3276	13	4.32E-04	****	9.51E-01	
0	1668.28	9	3	2.84	3337.90	3331	11	6.37E-04	96.5	9.41E-01	
0	1703.14	6	13	0.46	3407.67	3398	13	4.17E-04	****	9.28E-01	
0	1744.98	18	4	0.73	3491.42	3485	15	1.24E-03	67.4	9.15E-01	
0	1846.81	13	4	1.84	3695.23	3687	13	9.33E-04	78.1	8.86E-01	
0	2005.47	17	0	1.50	4012.82	4005	16	1.18E-03	48.5	8.56E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701002            *
* Acquisition date : 12-DEC-2007 12:39:33 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:08.39     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701002           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0988E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.871E+00	7.751E-01	1.805E-01	7.751E-01
CS-137	9.136E-02	4.077E-02	2.184E-02	4.077E-02
TL-208	2.234E-01	4.748E-02	1.895E-02	4.748E-02
BI-212	4.317E-01	2.827E-01	1.526E-01	2.827E-01
PB-212	6.392E-01	6.976E-02	3.054E-02	6.976E-02
BI-214	5.979E-01	1.172E-01	3.892E-02	1.172E-01
PB-214	6.863E-01	1.075E-01	3.593E-02	1.075E-01
RA-223	2.756E-01	1.907E-01	8.835E-02	1.907E-01
AC-228	8.308E-01	1.894E-01	7.229E-02	1.894E-01
TH-234	7.325E-01	4.079E-01	2.032E-01	4.079E-01
NP-237	4.227E-01	1.667E-01	9.507E-02	1.667E-01
AM-243	1.270E-01	3.718E-02	2.261E-02	3.718E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.426E-03	2.456E-02	2.079E-02	2.456E-02	NOT IDENT.
RH-101	-1.177E-02	2.299E-02	1.648E-02	2.299E-02	NOT IDENT.
SB-125	-6.864E-02	6.251E-02	4.874E-02	6.251E-02	NOT IDENT.
EU-155	2.138E-02	5.542E-02	4.934E-02	5.542E-02	NOT IDENT.
PO-209	7.447E-01	5.096E+00	4.266E+00	5.096E+00	NOT IDENT.
BI-211	-2.024E-01	7.560E-01	6.162E-01	7.560E-01	NOT IDENT.
PA-233	-3.908E-03	4.035E-02	3.470E-02	4.035E-02	NOT IDENT.
PA-234M	-5.710E-01	3.325E+00	2.468E+00	3.325E+00	NOT IDENT.
U-235	2.752E-03	1.371E-01	1.021E-01	1.371E-01	NOT IDENT.
NP-236	-1.049E-03	3.089E-02	2.718E-02	3.089E-02	NOT IDENT.
NP-239	2.300E-02	1.378E-01	1.148E-01	1.378E-01	NOT IDENT.
AM-241	-1.752E-02	1.087E-01	7.114E-02	1.087E-01	NOT IDENT.
CM-243	3.476E-04	5.048E-02	4.434E-02	5.048E-02	NOT IDENT.
AM-246	1.219E-01	8.952E-02	8.467E-02	8.952E-02	NOT IDENT.
CF-249	-8.008E-03	2.611E-02	2.175E-02	2.611E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	184.0668
63.29	243.7790
74.66	248.9043
74.81	249.0234
74.81	249.0234
77.11	250.8343
77.11	250.8343
86.48	241.1968
87.30	241.7607
87.30	241.7607
92.58	245.3335
98.44	242.2585
103.76	248.1907
105.31	236.8212
129.07	246.2749
143.76	268.0627
198.00	254.1241
209.25	239.1575
228.18	223.6230
238.63	247.8489
242.00	248.9287
269.46	173.1812
270.25	183.7435
277.36	180.6031
295.22	185.4373
300.09	162.0402
312.17	172.4774
338.32	173.3533
351.93	142.5821
387.59	148.2380
409.46	130.3532
427.87	143.2199
463.00	106.7500
510.77	111.5497
583.19	88.8244
609.31	103.5633
661.66	95.7245
727.33	77.0134
763.13	62.8525
768.36	71.6344
785.37	71.2184
794.95	72.2143
806.17	82.0481
831.80	84.0420
860.56	57.0974
896.60	62.2078
911.20	55.1649
934.06	63.1844
964.77	52.4056
968.97	39.8222
1001.03	41.7889
1078.86	37.7327
1120.29	41.3525
1155.19	45.5313
1173.23	39.9607
1238.11	55.7448
1280.96	38.3386
1332.51	21.5204
1377.67	37.3843
1401.50	23.3013
1407.98	21.9980
1460.80	25.5127
1509.23	37.6959
1588.20	23.5587
1620.50	15.2009
1729.60	12.6813
1764.49	61.9585

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701002

Total Uranium Activity	1.2732E-03	ug/g
Total Uranium Counting Unc.	6.3415E-02	ug/g
Total Uranium Tpu	6.3415E-08	ug/g
Total Uranium Mda	4.7232E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:50:39.72

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701003.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:36:17
Sample ID        : G198701003           Sample quantity  : 1.28670E+02 GRAM
Detector name    : GAM06                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.74  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.11*	38	357	0.90	126.26	123	6	2.62E-03	88.8	
2	5	74.48*	300	411	1.07	148.97	144	17	2.08E-02	12.4	6.66E-01
3	5	76.76*	556	369	1.02	153.54	144	17	3.86E-02	7.4	
4	5	78.82*	44	383	1.09	157.64	144	17	3.03E-03	91.6	
5	3	83.84*	104	429	1.31	167.68	161	30	7.25E-03	38.2	1.20E+00
6	3	86.83	275	439	1.32	173.65	161	30	1.91E-02	14.7	
7	3	89.57	187	393	1.17	179.12	161	30	1.30E-02	19.1	
8	3	92.20*	190	401	1.23	184.39	161	30	1.32E-02	21.4	
9	0	129.17*	29	476	0.82	258.26	253	9	2.03E-03	139.6	
10	0	143.82	53	378	1.44	287.53	284	7	3.67E-03	62.6	
11	0	185.60*	191	477	1.18	371.00	367	10	1.32E-02	24.3	
12	0	209.37	128	390	1.08	418.51	414	10	8.90E-03	30.3	
13	5	238.31*	1216	275	1.14	476.34	471	17	8.44E-02	3.8	1.56E+00
14	5	241.38	325	323	1.69	482.47	471	17	2.25E-02	14.3	
15	0	269.80	87	375	1.34	539.25	532	12	6.02E-03	45.9	
16	0	276.18	50	286	2.77	552.00	549	10	3.45E-03	65.2	
17	0	294.87*	403	293	1.17	589.35	584	11	2.80E-02	10.1	
18	0	300.03	39	226	1.32	599.66	596	8	2.73E-03	68.2	
19	0	327.72	83	168	1.33	655.01	651	8	5.79E-03	29.1	
20	0	337.95*	196	259	1.47	675.45	671	10	1.36E-02	17.6	
21	0	351.57*	797	202	1.23	702.66	696	12	5.53E-02	5.2	
22	0	355.28	24	132	0.84	710.08	708	7	1.66E-03	81.6	
23	0	373.43	40	103	1.52	746.36	743	7	2.78E-03	45.1	
24	0	409.82	41	162	1.49	819.07	814	10	2.85E-03	60.5	
25	0	463.60	89	173	1.53	926.56	918	14	6.19E-03	33.2	
26	0	469.83	20	97	1.40	939.01	937	8	1.41E-03	86.6	
27	0	486.30	33	100	2.92	971.93	967	10	2.28E-03	60.5	
28	0	510.59*	174	166	2.13	1020.48	1012	18	1.21E-02	23.2	
29	0	582.93*	325	124	1.55	1165.06	1157	15	2.26E-02	9.6	
30	0	608.93*	513	140	1.38	1217.03	1212	13	3.56E-02	6.9	
31	0	661.17	196	120	1.44	1321.45	1315	13	1.36E-02	13.6	
32	0	727.40	60	117	1.34	1453.85	1449	13	4.17E-03	39.7	
33	6	768.16	31	52	1.74	1535.32	1532	15	2.16E-03	39.4	1.10E+00
34	6	772.04	23	51	2.07	1543.09	1532	15	1.60E-03	59.7	
35	0	785.55	31	51	0.56	1570.10	1566	9	2.12E-03	46.1	
36	0	860.90	42	49	2.37	1720.72	1715	11	2.91E-03	35.9	
37	0	887.35	18	24	0.60	1773.61	1770	8	1.25E-03	52.7	
38	0	910.96*	199	88	1.86	1820.80	1814	13	1.38E-02	12.6	

Sample ID : G198701003 Acquisition date : 13-DEC-2007 05:36:17

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	934.32	16	69	0.75	1867.52	1860	12	1.09E-03	109.0	
40	0	963.73	45	52	1.07	1926.32	1919	13	3.14E-03	36.1	
41	0	968.68*	159	32	1.95	1936.20	1932	9	1.10E-02	10.8	
42	0	1000.66*	21	42	3.15	2000.14	1994	12	1.46E-03	72.3	
43	0	1120.39*	128	67	1.01	2239.55	2231	16	8.92E-03	17.5	
44	0	1210.81	13	61	4.68	2420.35	2413	16	9.34E-04	131.8	
45	0	1237.77	67	67	2.00	2474.27	2465	17	4.63E-03	30.8	
46	0	1264.37	13	18	3.22	2527.46	2520	12	9.03E-04	70.9	
47	0	1460.23*	516	26	1.69	2919.17	2911	17	3.58E-02	5.2	
48	0	1475.70	13	4	1.33	2950.11	2946	8	9.35E-04	37.1	
49	0	1498.50	39	21	9.09	2995.73	2984	22	2.69E-03	34.8	
50	0	1509.36	29	8	1.97	3017.44	3013	10	2.03E-03	25.6	
51	0	1588.96	20	27	2.22	3176.67	3170	12	1.42E-03	55.3	
52	0	1593.00	16	6	0.65	3184.74	3181	10	1.09E-03	43.8	
53	0	1630.46	13	14	1.77	3259.68	3252	12	8.91E-04	66.1	
54	0	1729.95	27	12	2.38	3458.71	3449	16	1.87E-03	34.7	
55	0	1738.02	9	9	0.72	3474.85	3468	12	6.54E-04	71.2	
56	0	1764.29*	83	8	2.84	3527.40	3518	16	5.79E-03	15.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701003       *
* Acquisition date : 13-DEC-2007 05:36:17 Detector SN#    :                 *
* Detector ID      : GAM06                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.74     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701003           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2867E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 20-FEB-2007 10:58:43 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	7.352E+00	8.773E-01	3.631E-01	0.000E+00
CS-137	1.706E-01	4.676E-02	4.125E-02	0.000E+00
TL-208	2.545E-01	5.094E-02	3.597E-02	0.000E+00
BI-212	4.084E-01	3.191E-01	3.101E-01	0.000E+00
PB-212	9.312E-01	9.003E-02	5.973E-02	0.000E+00
BI-214	7.651E-01	1.148E-01	6.882E-02	0.000E+00
PB-214	9.391E-01	1.119E-01	6.792E-02	0.000E+00
RA-223	2.299E-01	2.074E-01	1.928E-01	0.000E+00
AC-228	7.617E-01	2.021E-01	1.451E-01	0.000E+00
PA-234M	2.705E+00	3.839E+00	4.592E+00	0.000E+00
TH-234	9.324E-01	3.987E-01	4.426E-01	0.000E+00
U-235	1.195E-01	1.468E-01	2.118E-01	0.000E+00
NP-237	6.241E-01	1.871E-01	2.053E-01	0.000E+00
AM-243	1.556E-01	3.997E-02	5.073E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	-3.489E-02	2.821E-02	4.084E-02	0.000E+00	NOT IDENT.
RH-101	3.102E-02	2.104E-02	3.929E-02	0.000E+00	NOT IDENT.
SB-125	7.324E-02	5.598E-02	1.019E-01	0.000E+00	NOT IDENT.
EU-155	-1.210E-02	6.128E-02	1.056E-01	0.000E+00	NOT IDENT.
PO-209	-1.423E+00	4.593E+00	7.436E+00	0.000E+00	NOT IDENT.
BI-211	-6.316E-01	6.596E-01	1.012E+00	0.000E+00	NOT IDENT.
PA-233	4.218E-02	4.065E-02	7.361E-02	0.000E+00	NOT IDENT.
NP-236	-8.646E-03	3.646E-02	6.115E-02	0.000E+00	NOT IDENT.
NP-239	-1.433E-01	1.348E-01	2.282E-01	0.000E+00	NOT IDENT.
AM-241	1.734E-03	9.793E-02	1.579E-01	0.000E+00	NOT IDENT.
CM-243	-5.068E-03	5.497E-02	9.523E-02	0.000E+00	NOT IDENT.
AM-246	7.843E-02	8.413E-02	1.554E-01	0.000E+00	NOT IDENT.
CF-249	5.365E-03	2.572E-02	4.422E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:50:40.80

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701003.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:36:17
Sample ID        : G198701003           Sample quantity  : 1.28670E+02 GRAM
Detector name    : GAM06                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.74  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	516	10.66*	9.605E-01	7.352E+00	7.352E+00	12.18
CS-137	661.66	196	85.10*	1.977E+00	1.698E-01	1.706E-01	27.97
TL-208	277.36	50	6.31	3.949E+00	2.907E-01	2.907E-01	130.56
	510.77	174	22.60	2.457E+00	4.562E-01	4.562E-01	46.95
	583.19	325	84.50*	2.202E+00	2.545E-01	2.545E-01	20.42
	763.13	------	1.81	1.741E+00	------	Line Not Found	------
	860.56	42	12.42	1.558E+00	3.162E-01	3.162E-01	72.51
BI-212	727.33	60	11.80*	1.818E+00	4.084E-01	4.084E-01	79.73
	785.37	31	1.10	1.695E+00	2.387E+00	2.387E+00	92.69
	1620.50	------	1.49	8.878E-01	------	Line Not Found	------
PB-212	74.81	300	10.40	4.126E+00	1.020E+00	1.020E+00	26.22
	77.11	556	17.50	4.361E+00	1.063E+00	1.063E+00	16.90
	87.30	275	7.81	5.188E+00	9.909E-01	9.909E-01	30.59
	238.63	1216	43.30*	4.397E+00	9.312E-01	9.312E-01	9.87
	300.09	39	3.28	3.712E+00	4.701E-01	4.701E-01	136.61
BI-214	609.31	513	46.10*	2.123E+00	7.650E-01	7.651E-01	15.31
	768.36	31	4.94	1.730E+00	5.316E-01	5.317E-01	79.25
	806.17	------	1.22	1.656E+00	------	Line Not Found	------
	934.06	16	3.03	1.443E+00	5.232E-01	5.232E-01	218.15
	1120.29	128	15.10	1.216E+00	1.021E+00	1.021E+00	35.87
	1155.19	------	1.63	1.181E+00	------	Line Not Found	------
	1238.11	67	5.79	1.108E+00	1.516E+00	1.516E+00	62.01
	1280.96	------	1.43	1.075E+00	------	Line Not Found	------
	1377.67	------	4.00	1.008E+00	------	Line Not Found	------
	1401.50	------	1.27	9.936E-01	------	Line Not Found	------
	1407.98	------	2.15	9.898E-01	------	Line Not Found	------
	1509.23	29	2.11	9.356E-01	2.156E+00	2.156E+00	51.58
	1729.60	27	2.92	8.508E-01	1.578E+00	1.578E+00	69.69
	1764.49	83	15.40	8.411E-01	9.383E-01	9.384E-01	31.40
PB-214	74.81	300	6.44	4.126E+00	1.647E+00	1.647E+00	26.22
	77.11	556	10.80	4.361E+00	1.722E+00	1.722E+00	16.90
	87.30	275	4.84	5.188E+00	1.599E+00	1.599E+00	30.59

Sample ID : G198701003 Acquisition date : 13-DEC-2007 05:36:17

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	325	7.43	4.357E+00	1.463E+00	1.463E+00	29.26
	295.22	403	19.30	3.761E+00	8.100E-01	8.101E-01	21.27
	351.93	797	37.60*	3.292E+00	9.390E-01	9.391E-01	12.16
RA-223	269.46	87	13.70*	4.018E+00	2.299E-01	2.299E-01	92.06
AC-228	129.07	29	2.42	6.050E+00	2.917E-01	2.917E-01	279.24
	209.25	128	3.89	4.811E+00	9.983E-01	9.983E-01	60.88
	270.25	87	3.46	4.018E+00	9.102E-01	9.102E-01	92.06
	338.32	196	11.27	3.393E+00	7.467E-01	7.467E-01	35.69
	409.46	41	1.92	2.925E+00	1.065E+00	1.065E+00	121.16
	463.00	89	4.40	2.655E+00	1.112E+00	1.112E+00	66.69
	794.95	------	4.25	1.677E+00	------	Line Not Found	------
	911.20	199	25.80*	1.478E+00	7.617E-01	7.617E-01	27.08
	964.77	45	4.99	1.401E+00	9.435E-01	9.435E-01	72.76
	968.97	159	15.80	1.395E+00	1.052E+00	1.052E+00	23.66
	1588.20	20	3.22	9.002E-01	1.029E+00	1.029E+00	110.84
PA-234M	1001.03	21	0.84*	1.352E+00	2.705E+00	2.705E+00	144.82
TH-234	63.29	38	4.80	2.742E+00	4.187E-01	4.187E-01	177.88
	92.58	190	5.41*	5.499E+00	9.324E-01	9.324E-01	43.63
U-235	143.76	53	10.96*	5.889E+00	1.195E-01	1.195E-01	125.29
NP-237	86.48	275	12.40*	5.188E+00	6.241E-01	6.241E-01	30.59
AM-243	74.66	300	68.20*	4.126E+00	1.556E-01	1.556E-01	26.22

Flag: "*" = Keyline

Sample ID : G198701003 Acquisition date : 13-DEC-2007 05:36:17

Total number of lines in spectrum	56	
Number of unidentified lines	18	
Number of lines tentatively identified by NID	38	67.86%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	7.352E+00	7.352E+00	0.895E+00	12.18	
CS-137	9.47E+08S	1.00	1.698E-01	1.706E-01	0.477E-01	27.97	
TL-208	4.43E+17S	1.00	2.545E-01	2.545E-01	0.520E-01	20.42	
BI-212	4.43E+17S	1.00	4.084E-01	4.084E-01	3.256E-01	79.73	
PB-212	4.43E+17S	1.00	9.312E-01	9.312E-01	0.919E-01	9.87	
BI-214	5.05E+10S	1.00	7.650E-01	7.651E-01	1.172E-01	15.31	
PB-214	5.05E+10S	1.00	9.390E-01	9.391E-01	1.142E-01	12.16	
RA-223	1.04E+12S	1.00	2.299E-01	2.299E-01	2.116E-01	92.06	
AC-228	4.43E+17S	1.00	7.617E-01	7.617E-01	2.063E-01	27.08	
PA-234M	1.41E+17S	1.00	2.705E+00	2.705E+00	3.917E+00	144.82	
TH-234	1.41E+17S	1.00	9.324E-01	9.324E-01	4.068E-01	43.63	
U-235	2.22E+16S	1.00	1.195E-01	1.195E-01	1.498E-01	125.29	
NP-237	6.75E+13S	1.00	6.241E-01	6.241E-01	1.909E-01	30.59	
AM-243	2.33E+11S	1.00	1.556E-01	1.556E-01	0.408E-01	26.22	
			---	---			
		Total Activity :	1.635E+01	1.635E+01			
		Grand Total Activity :	1.635E+01	1.635E+01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701003 Acquisition date : 13-DEC-2007 05:36:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	78.82	44	383	1.09	157.64	144	17	3.03E-03	****	4.56E+00	
3	83.84	104	429	1.31	167.68	161	30	7.25E-03	76.3	4.98E+00	
3	89.57	187	393	1.17	179.12	161	30	1.30E-02	38.3	5.36E+00	
0	185.60	191	477	1.18	371.00	367	10	1.32E-02	48.7	5.20E+00	
0	327.72	83	168	1.33	655.01	651	8	5.79E-03	58.1	3.47E+00	
0	355.28	24	132	0.84	710.08	708	7	1.66E-03	****	3.27E+00	
0	373.43	40	103	1.52	746.36	743	7	2.78E-03	90.2	3.14E+00	
0	469.83	20	97	1.40	939.01	937	8	1.41E-03	****	2.63E+00	
0	486.30	33	100	2.92	971.93	967	10	2.28E-03	****	2.56E+00	
6	772.04	23	51	2.07	1543.09	1532	15	1.60E-03	****	1.72E+00	
0	887.35	18	24	0.60	1773.61	1770	8	1.25E-03	****	1.51E+00	
0	1210.81	13	61	4.68	2420.35	2413	16	9.34E-04	****	1.13E+00	
0	1264.37	13	18	3.22	2527.46	2520	12	9.03E-04	****	1.09E+00	
0	1475.70	13	4	1.33	2950.11	2946	8	9.35E-04	74.2	9.52E-01	
0	1498.50	39	21	9.09	2995.73	2984	22	2.69E-03	69.6	9.41E-01	
0	1593.00	16	6	0.65	3184.74	3181	10	1.09E-03	87.7	8.99E-01	
0	1630.46	13	14	1.77	3259.68	3252	12	8.91E-04	****	8.84E-01	
0	1738.02	9	9	0.72	3474.85	3468	12	6.54E-04	****	8.48E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701003            *
* Acquisition date : 13-DEC-2007 05:36:17 Detector SN#    :                 *
* Detector ID      : GAM06                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.74     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701003           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2867E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 20-FEB-2007 10:58:43 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	7.352E+00	8.773E-01	1.817E-01	8.773E-01
CS-137	1.706E-01	4.676E-02	2.064E-02	4.676E-02
TL-208	2.545E-01	5.094E-02	1.800E-02	5.094E-02
BI-212	4.084E-01	3.191E-01	1.552E-01	3.191E-01
PB-212	9.312E-01	9.003E-02	2.989E-02	9.003E-02
BI-214	7.651E-01	1.148E-01	3.443E-02	1.148E-01
PB-214	9.391E-01	1.119E-01	3.398E-02	1.119E-01
RA-223	2.299E-01	2.074E-01	9.645E-02	2.074E-01
AC-228	7.617E-01	2.021E-01	7.260E-02	2.021E-01
PA-234M	2.705E+00	3.839E+00	2.297E+00	3.839E+00
TH-234	9.324E-01	3.987E-01	2.214E-01	3.987E-01
U-235	1.195E-01	1.468E-01	1.060E-01	1.468E-01
NP-237	6.241E-01	1.871E-01	1.027E-01	1.871E-01
AM-243	1.556E-01	3.997E-02	2.538E-02	3.997E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-3.489E-02	2.821E-02	2.043E-02	2.821E-02	NOT IDENT.
RH-101	3.102E-02	2.104E-02	1.966E-02	2.104E-02	NOT IDENT.
SB-125	7.324E-02	5.598E-02	5.100E-02	5.598E-02	NOT IDENT.
EU-155	-1.210E-02	6.128E-02	5.284E-02	6.128E-02	NOT IDENT.
PO-209	-1.423E+00	4.593E+00	3.720E+00	4.593E+00	NOT IDENT.
BI-211	-6.316E-01	6.596E-01	5.064E-01	6.596E-01	NOT IDENT.
PA-233	4.218E-02	4.065E-02	3.683E-02	4.065E-02	NOT IDENT.
NP-236	-8.646E-03	3.646E-02	3.059E-02	3.646E-02	NOT IDENT.
NP-239	-1.433E-01	1.348E-01	1.142E-01	1.348E-01	NOT IDENT.
AM-241	1.734E-03	9.793E-02	7.898E-02	9.793E-02	NOT IDENT.
CM-243	-5.068E-03	5.497E-02	4.764E-02	5.497E-02	NOT IDENT.
AM-246	7.843E-02	8.413E-02	7.773E-02	8.413E-02	NOT IDENT.
CF-249	5.365E-03	2.572E-02	2.212E-02	2.572E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	322.1006
63.29	356.1712
74.66	407.8277
74.81	407.9654
74.81	407.9654
77.11	410.0523
77.11	410.0523
86.48	344.0883
87.30	344.6600
87.30	344.6600
92.58	348.2814
98.44	355.2186
103.76	337.2292
105.31	345.3372
129.07	386.8885
143.76	377.9958
198.00	308.9935
209.25	292.5089
228.18	302.0479
238.63	265.0361
242.00	265.9211
269.46	232.4369
270.25	230.5347
277.36	238.8301
295.22	197.1281
300.09	235.0508
312.17	176.6860
338.32	191.3291
351.93	146.5864
387.59	158.0147
409.46	154.0746
427.87	98.6493
463.00	126.8369
510.77	112.5570
583.19	94.4820
609.31	95.7047
661.66	100.9651
727.33	94.0050
763.13	73.6431
768.36	88.8940
785.37	73.9624
794.95	68.1401
806.17	71.5022
831.80	84.5825
860.56	56.2992
896.60	65.4860
911.20	65.4696
934.06	60.6386
964.77	37.8446
968.97	50.5301
1001.03	58.3594
1078.86	44.8535
1120.29	44.4660
1155.19	54.4789
1173.23	59.5655
1238.11	42.0622
1280.96	42.5468
1332.51	35.0968
1377.67	40.5697
1401.50	48.9707
1407.98	32.6992
1460.80	30.0113
1509.23	21.6938
1588.20	43.8315
1620.50	22.2386
1729.60	13.1738
1764.49	28.1936

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701003

Total Uranium Activity	5.5312E-02	ug/g
Total Uranium Counting Unc.	6.7914E-02	ug/g
Total Uranium Tpu	6.7914E-08	ug/g
Total Uranium Mda	4.9037E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:51:15.46

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701004.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:36:53
Sample ID        : G198701004           Sample quantity  : 8.77900E+01 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:05.47  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.50*	99	348	0.97	93.50	90	7	6.85E-03	38.4	
2	2	60.95	48	122	0.99	122.36	121	11	3.35E-03	29.6	2.55E+00
3	2	63.38*	81	328	0.77	127.22	121	11	5.63E-03	46.0	
4	2	74.94*	625	463	0.97	150.31	146	12	4.34E-02	6.9	1.43E+00
5	2	77.20*	918	336	0.84	154.85	146	12	6.38E-02	4.8	
6	2	84.33*	102	449	1.10	169.08	166	27	7.05E-03	37.1	2.75E+00
7	2	87.33*	296	414	1.11	175.09	166	27	2.06E-02	13.1	
8	2	90.12	255	274	0.88	180.66	166	27	1.77E-02	11.4	
9	2	92.83*	322	333	1.12	186.06	166	27	2.23E-02	14.5	
10	0	105.46*	55	372	1.31	211.31	207	8	3.85E-03	65.0	
11	0	108.76	47	239	0.64	217.90	216	5	3.27E-03	51.4	
12	0	128.67	73	376	0.92	257.68	255	8	5.05E-03	47.5	
13	0	144.14*	29	300	0.94	288.59	286	8	1.98E-03	118.6	
14	0	185.96*	222	359	1.15	372.17	367	10	1.54E-02	19.1	
15	0	209.17	122	388	1.20	418.55	413	12	8.50E-03	33.5	
16	4	236.31	36	150	1.62	472.78	470	19	2.50E-03	55.7	4.54E+00
17	4	238.75*	1165	151	0.97	477.64	470	19	8.09E-02	3.6	
18	4	241.45	375	254	1.64	483.04	470	19	2.60E-02	11.8	
19	0	269.64	100	321	1.86	539.39	535	14	6.97E-03	38.9	
20	0	277.36	30	219	1.22	554.81	552	8	2.10E-03	86.7	
21	2	295.29*	396	120	1.19	590.64	585	24	2.75E-02	7.3	1.42E+00
22	2	300.21	122	150	1.43	600.47	585	24	8.50E-03	20.3	
23	2	302.96	38	116	1.18	605.97	585	24	2.65E-03	51.0	
24	0	328.02	41	169	0.94	656.05	653	8	2.88E-03	56.4	
25	0	338.35*	183	256	1.27	676.70	671	12	1.27E-02	20.0	
26	0	352.05*	568	222	1.17	704.06	699	11	3.94E-02	7.0	
27	0	378.03	61	182	3.52	755.98	750	13	4.21E-03	47.7	
28	0	463.54	51	113	1.26	926.88	923	8	3.55E-03	38.7	
29	0	510.87*	48	185	2.75	1021.47	1016	15	3.36E-03	77.5	
30	0	583.36*	344	120	1.49	1166.35	1162	12	2.39E-02	8.6	
31	0	609.46*	436	98	1.30	1218.52	1213	12	3.03E-02	7.2	
32	0	622.88	16	68	0.64	1245.33	1241	8	1.12E-03	92.8	
33	0	627.30	35	70	1.55	1254.17	1249	10	2.43E-03	47.8	
34	1	661.88*	107	76	1.62	1323.29	1315	19	7.42E-03	18.7	1.39E+00
35	1	665.36	36	45	1.61	1330.23	1315	19	2.47E-03	40.8	
36	0	694.36	36	84	2.37	1388.20	1381	12	2.51E-03	53.4	
37	0	699.76	14	81	0.98	1398.99	1395	8	9.99E-04	111.0	
38	0	727.50	75	122	1.69	1454.44	1446	14	5.19E-03	33.5	

Sample ID : G198701004 Acquisition date : 13-DEC-2007 05:36:53

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	768.25	59	81	1.31	1535.90	1531	10	4.08E-03	31.7	
40	0	785.78	39	62	0.59	1570.93	1565	12	2.69E-03	43.9	
41	0	795.54	32	72	1.13	1590.44	1585	11	2.22E-03	54.9	
42	0	831.43	17	61	2.84	1662.18	1656	9	1.21E-03	83.9	
43	0	860.79	48	67	1.90	1720.88	1716	11	3.35E-03	35.7	
44	0	911.22*	272	62	1.36	1821.66	1815	15	1.89E-02	9.1	
45	3	964.42	55	37	2.20	1928.02	1923	20	3.85E-03	24.6	3.29E+00
46	3	969.06*	126	51	1.88	1937.30	1923	20	8.78E-03	15.0	
47	0	1001.30*	9	54	1.38	2001.74	1995	12	6.11E-04	191.5	
48	0	1006.58	27	32	0.95	2012.30	2007	11	1.91E-03	44.5	
49	0	1014.24*	2	41	0.57	2027.60	2023	8	1.71E-04	494.5	
50	0	1042.22	23	41	1.33	2083.54	2078	12	1.58E-03	60.7	
51	0	1120.56*	65	73	1.38	2240.15	2232	14	4.54E-03	32.6	
52	0	1127.16	20	26	1.17	2253.35	2249	9	1.36E-03	52.6	
53	0	1136.24	9	32	0.42	2271.49	2265	9	6.14E-04	119.6	
54	0	1146.25	25	45	5.10	2291.51	2282	13	1.74E-03	59.0	
55	1	1176.18	20	30	1.94	2351.35	2348	23	1.36E-03	48.3	3.24E+00
56	1	1183.84	24	22	1.94	2366.65	2348	23	1.64E-03	39.5	
57	0	1238.59	41	45	2.06	2476.12	2469	11	2.85E-03	33.7	
58	0	1284.82	6	21	1.61	2568.54	2563	8	4.14E-04	137.3	
59	0	1319.36	12	32	4.69	2637.60	2628	12	8.65E-04	99.0	
60	0	1356.62	16	4	1.55	2712.10	2709	7	1.11E-03	33.9	
61	0	1460.87*	354	11	1.85	2920.54	2914	16	2.46E-02	6.0	
62	0	1496.09	20	15	2.26	2990.95	2984	12	1.40E-03	44.4	
63	0	1620.63	14	11	1.90	3239.98	3235	8	9.53E-04	51.0	
64	0	1630.46	22	11	2.61	3259.64	3252	12	1.51E-03	38.2	
65	0	1638.32	12	8	3.52	3275.34	3268	11	8.28E-04	54.8	
66	0	1658.11	15	6	1.35	3314.91	3308	12	1.06E-03	40.9	
67	0	1729.49*	31	7	2.00	3457.65	3451	13	2.18E-03	26.6	
68	0	1764.68*	77	9	1.75	3528.03	3519	16	5.31E-03	15.9	
69	0	1849.37*	16	18	1.77	3697.38	3687	16	1.08E-03	73.2	
70	0	1906.25*	0	6	0.70	3811.13	3802	12	3.21E-06	*****	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701004       *
* Acquisition date : 13-DEC-2007 05:36:53 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:05.47     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701004           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 8.7790E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	7.951E+00	1.021E+00	5.309E-01	0.000E+00
CS-137	1.507E-01	5.642E-02	5.669E-02	0.000E+00
EU-155	8.465E-02	1.081E-01	1.138E-01	0.000E+00
TL-208	4.320E-01	7.876E-02	5.616E-02	0.000E+00
BI-211	7.807E-01	1.285E+00	1.975E+00	0.000E+00
BI-212	8.269E-01	5.454E-01	4.470E-01	0.000E+00
PB-212	1.300E+00	1.371E-01	6.881E-02	0.000E+00
BI-214	1.046E+00	1.639E-01	1.031E-01	0.000E+00
PB-214	1.006E+00	1.517E-01	9.962E-02	0.000E+00
RA-223	3.894E-01	2.983E-01	2.272E-01	0.000E+00
AC-228	1.690E+00	3.212E-01	1.862E-01	0.000E+00
PA-234M	1.827E+00	6.856E+00	6.951E+00	0.000E+00
TH-234	1.823E+00	5.341E-01	4.702E-01	0.000E+00
U-235	9.195E-02	2.139E-01	2.457E-01	0.000E+00
NP-237	7.266E-01	1.921E-01	2.021E-01	0.000E+00
AM-241	4.132E-02	2.414E-02	6.775E-02	0.000E+00
AM-243	2.764E-01	4.136E-02	4.132E-02	0.000E+00
CM-243	7.617E-02	9.730E-02	1.021E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	-3.161E-02	4.843E-02	6.153E-02	0.000E+00	NOT IDENT.
RH-101	1.079E-02	3.019E-02	4.647E-02	0.000E+00	NOT IDENT.
SB-125	7.217E-02	8.349E-02	1.459E-01	0.000E+00	NOT IDENT.
PO-209	-2.959E-01	6.838E+00	1.136E+01	0.000E+00	NOT IDENT.
PA-233	-5.873E-03	5.082E-02	8.550E-02	0.000E+00	NOT IDENT.
NP-236	3.627E-02	4.559E-02	6.659E-02	0.000E+00	NOT IDENT.
NP-239	1.128E-01	1.659E-01	2.756E-01	0.000E+00	NOT IDENT.
AM-246	-1.016E-02	1.327E-01	2.165E-01	0.000E+00	NOT IDENT.
CF-249	-9.783E-03	3.393E-02	5.574E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:51:16.40

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701004.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:36:53
Sample ID        : G198701004           Sample quantity  : 8.77900E+01 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:05.47  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	354	10.66*	8.924E-01	7.951E+00	7.951E+00	13.10
CS-137	661.66	107	85.10*	1.789E+00	1.500E-01	1.507E-01	38.20
EU-155	105.31	55	21.20*	6.793E+00	8.222E-02	8.465E-02	130.35
TL-208	277.36	30	6.31	3.932E+00	2.600E-01	2.600E-01	173.65
	510.77	48	22.60	2.282E+00	2.007E-01	2.007E-01	155.21
	583.19	344	84.50*	2.014E+00	4.320E-01	4.320E-01	18.60
	763.13	------	1.81	1.568E+00	------	Line Not Found	------
	860.56	48	12.42	1.404E+00	5.913E-01	5.913E-01	71.74
BI-211	831.80	17	3.30*	1.449E+00	7.807E-01	7.807E-01	167.97
BI-212	727.33	75	11.80*	1.638E+00	8.269E-01	8.269E-01	67.30
	785.37	39	1.10	1.526E+00	4.942E+00	4.942E+00	88.07
	1620.50	14	1.49	8.222E-01	2.394E+00	2.394E+00	102.19
PB-212	74.81	625	10.40	7.088E+00	1.812E+00	1.812E+00	15.27
	77.11	918	17.50	7.087E+00	1.583E+00	1.583E+00	11.60
	87.30	296	7.81	7.032E+00	1.154E+00	1.154E+00	26.98
	238.63	1165	43.30*	4.423E+00	1.300E+00	1.300E+00	10.76
	300.09	122	3.28	3.683E+00	2.166E+00	2.166E+00	41.34
BI-214	609.31	436	46.10*	1.933E+00	1.046E+00	1.046E+00	15.98
	768.36	59	4.94	1.558E+00	1.632E+00	1.632E+00	63.76
	806.17	------	1.22	1.490E+00	------	Line Not Found	------
	934.06	------	3.03	1.304E+00	------	Line Not Found	------
	1120.29	65	15.10	1.112E+00	8.330E-01	8.331E-01	65.48
	1155.19	------	1.63	1.083E+00	------	Line Not Found	------
	1238.11	41	5.79	1.022E+00	1.484E+00	1.484E+00	67.73
	1280.96	------	1.43	9.933E-01	------	Line Not Found	------
	1377.67	------	4.00	9.356E-01	------	Line Not Found	------
	1401.50	------	1.27	9.227E-01	------	Line Not Found	------
	1407.98	------	2.15	9.193E-01	------	Line Not Found	------
	1509.23	------	2.11	8.695E-01	------	Line Not Found	------
	1729.60	31	2.92	7.820E-01	2.942E+00	2.942E+00	53.43
	1764.49	77	15.40	7.701E-01	1.380E+00	1.380E+00	32.35
PB-214	74.81	625	6.44	7.088E+00	2.927E+00	2.927E+00	15.27

Sample ID : G198701004 Acquisition date : 13-DEC-2007 05:36:53

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	77.11	918	10.80	7.087E+00	2.565E+00	2.566E+00	11.60
	87.30	296	4.84	7.032E+00	1.861E+00	1.862E+00	26.98
	242.00	375	7.43	4.385E+00	2.460E+00	2.460E+00	24.96
	295.22	396	19.30	3.734E+00	1.174E+00	1.174E+00	16.46
	351.93	568	37.60*	3.210E+00	1.006E+00	1.006E+00	15.38
RA-223	269.46	100	13.70*	4.023E+00	3.894E-01	3.894E-01	78.16
AC-228	129.07	73	2.42	6.365E+00	1.010E+00	1.010E+00	95.48
	209.25	122	3.89	4.866E+00	1.382E+00	1.382E+00	67.47
	270.25	100	3.46	4.023E+00	1.542E+00	1.542E+00	78.16
	338.32	183	11.27	3.324E+00	1.042E+00	1.042E+00	40.58
	409.46	------	1.92	2.802E+00	------	Line Not Found	------
	463.00	51	4.40	2.499E+00	9.954E-01	9.954E-01	77.60
	794.95	32	4.25	1.509E+00	1.066E+00	1.066E+00	110.09
	911.20	272	25.80*	1.334E+00	1.690E+00	1.690E+00	19.39
	964.77	55	4.99	1.268E+00	1.875E+00	1.875E+00	49.62
	968.97	126	15.80	1.262E+00	1.355E+00	1.355E+00	30.76
	1588.20	------	3.22	8.353E-01	------	Line Not Found	------
PA-234M	1001.03	9	0.84*	1.226E+00	1.827E+00	1.827E+00	383.00
TH-234	63.29	81	4.80	7.002E+00	5.160E-01	5.160E-01	92.20
	92.58	322	5.41*	6.974E+00	1.823E+00	1.823E+00	29.90
U-235	143.76	29	10.96*	6.057E+00	9.195E-02	9.195E-02	237.41
NP-237	86.48	296	12.40*	7.032E+00	7.266E-01	7.266E-01	26.98
AM-241	59.54	48	35.90*	6.960E+00	4.131E-02	4.132E-02	59.62
AM-243	74.66	625	68.20*	7.088E+00	2.764E-01	2.764E-01	15.27
CM-243	103.76	55	23.00*	6.793E+00	7.578E-02	7.617E-02	130.35

Flag: "*" = Keyline

Sample ID : G198701004 Acquisition date : 13-DEC-2007 05:36:53

Total number of lines in spectrum 70
Number of unidentified lines 31
Number of lines tentatively identified by NID 39 55.71%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	7.951E+00	7.951E+00	1.042E+00	13.10	
CS-137	9.47E+08S	1.00	1.500E-01	1.507E-01	0.576E-01	38.20	
EU-155	1.57E+08S	1.03	8.222E-02	8.465E-02	11.03E-02	130.35	
TL-208	4.43E+17S	1.00	4.320E-01	4.320E-01	0.804E-01	18.60	
BI-211	2.22E+16S	1.00	7.807E-01	7.807E-01	13.11E-01	167.97	
BI-212	4.43E+17S	1.00	8.269E-01	8.269E-01	5.566E-01	67.30	
PB-212	4.43E+17S	1.00	1.300E+00	1.300E+00	0.140E+00	10.76	
BI-214	5.05E+10S	1.00	1.046E+00	1.046E+00	0.167E+00	15.98	
PB-214	5.05E+10S	1.00	1.006E+00	1.006E+00	0.155E+00	15.38	
RA-223	1.04E+12S	1.00	3.894E-01	3.894E-01	3.043E-01	78.16	
AC-228	4.43E+17S	1.00	1.690E+00	1.690E+00	0.328E+00	19.39	
PA-234M	1.41E+17S	1.00	1.827E+00	1.827E+00	6.996E+00	383.00	
TH-234	1.41E+17S	1.00	1.823E+00	1.823E+00	0.545E+00	29.90	
U-235	2.22E+16S	1.00	9.195E-02	9.195E-02	21.83E-02	237.41	
NP-237	6.75E+13S	1.00	7.266E-01	7.266E-01	1.960E-01	26.98	
AM-241	1.36E+10S	1.00	4.131E-02	4.132E-02	2.464E-02	59.62	
AM-243	2.33E+11S	1.00	2.764E-01	2.764E-01	0.422E-01	15.27	
CM-243	8.99E+08S	1.01	7.578E-02	7.617E-02	9.929E-02	130.35	
			---	---			
	Total Activity :		2.052E+01	2.052E+01			

Grand Total Activity : 2.052E+01 2.052E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701004 Acquisition date : 13-DEC-2007 05:36:53

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.50	99	348	0.97	93.50	90	7	6.85E-03	76.9	6.47E+00	
2	84.33	102	449	1.10	169.08	166	27	7.05E-03	74.2	7.06E+00	
2	90.12	255	274	0.88	180.66	166	27	1.77E-02	22.8	7.00E+00	
0	108.76	47	239	0.64	217.90	216	5	3.27E-03	****	6.74E+00	
0	185.96	222	359	1.15	372.17	367	10	1.54E-02	38.2	5.26E+00	
4	236.31	36	150	1.62	472.78	470	19	2.50E-03	****	4.46E+00	
2	302.96	38	116	1.18	605.97	585	24	2.65E-03	****	3.65E+00	
0	328.02	41	169	0.94	656.05	653	8	2.88E-03	****	3.41E+00	
0	378.03	61	182	3.52	755.98	750	13	4.21E-03	95.4	3.01E+00	
0	622.88	16	68	0.64	1245.33	1241	8	1.12E-03	****	1.89E+00	
0	627.30	35	70	1.55	1254.17	1249	10	2.43E-03	95.6	1.88E+00	
1	665.36	36	45	1.61	1330.23	1315	19	2.47E-03	81.6	1.78E+00	
0	694.36	36	84	2.37	1388.20	1381	12	2.51E-03	****	1.71E+00	
0	699.76	14	81	0.98	1398.99	1395	8	9.99E-04	****	1.70E+00	
0	1006.58	27	32	0.95	2012.30	2007	11	1.91E-03	89.1	1.22E+00	
0	1014.24	2	41	0.57	2027.60	2023	8	1.71E-04	****	1.21E+00	
0	1042.22	23	41	1.33	2083.54	2078	12	1.58E-03	****	1.18E+00	
0	1127.16	20	26	1.17	2253.35	2249	9	1.36E-03	****	1.11E+00	
0	1136.24	9	32	0.42	2271.49	2265	9	6.14E-04	****	1.10E+00	
0	1146.25	25	45	5.10	2291.51	2282	13	1.74E-03	****	1.09E+00	
1	1176.18	20	30	1.94	2351.35	2348	23	1.36E-03	96.5	1.07E+00	
1	1183.84	24	22	1.94	2366.65	2348	23	1.64E-03	78.9	1.06E+00	
0	1284.82	6	21	1.61	2568.54	2563	8	4.14E-04	****	9.91E-01	
0	1319.36	12	32	4.69	2637.60	2628	12	8.65E-04	****	9.69E-01	
0	1356.62	16	4	1.55	2712.10	2709	7	1.11E-03	67.7	9.47E-01	
0	1496.09	20	15	2.26	2990.95	2984	12	1.40E-03	88.9	8.76E-01	
0	1630.46	22	11	2.61	3259.64	3252	12	1.51E-03	76.4	8.18E-01	
0	1638.32	12	8	3.52	3275.34	3268	11	8.28E-04	****	8.15E-01	
0	1658.11	15	6	1.35	3314.91	3308	12	1.06E-03	81.7	8.08E-01	
0	1849.37	16	18	1.77	3697.38	3687	16	1.08E-03	****	7.43E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701004            *
* Acquisition date : 13-DEC-2007 05:36:53 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:05.47     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701004           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 8.7790E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	7.951E+00	1.021E+00	2.656E-01	1.021E+00
CS-137	1.507E-01	5.642E-02	2.836E-02	5.642E-02
EU-155	8.465E-02	1.081E-01	5.691E-02	1.081E-01
TL-208	4.320E-01	7.876E-02	2.810E-02	7.876E-02
BI-211	7.807E-01	1.285E+00	9.881E-01	1.285E+00
BI-212	8.269E-01	5.454E-01	2.236E-01	5.454E-01
PB-212	1.300E+00	1.371E-01	3.442E-02	1.371E-01
BI-214	1.046E+00	1.639E-01	5.156E-02	1.639E-01
PB-214	1.006E+00	1.517E-01	4.984E-02	1.517E-01
RA-223	3.894E-01	2.983E-01	1.137E-01	2.983E-01
AC-228	1.690E+00	3.212E-01	9.316E-02	3.212E-01
PA-234M	1.827E+00	6.856E+00	3.478E+00	6.856E+00
TH-234	1.823E+00	5.341E-01	2.352E-01	5.341E-01
U-235	9.195E-02	2.139E-01	1.229E-01	2.139E-01
NP-237	7.266E-01	1.921E-01	1.011E-01	1.921E-01
AM-241	4.132E-02	2.414E-02	3.389E-02	2.414E-02
AM-243	2.764E-01	4.136E-02	2.067E-02	4.136E-02
CM-243	7.617E-02	9.730E-02	5.109E-02	9.730E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-3.161E-02	4.843E-02	3.078E-02	4.843E-02	NOT IDENT.
RH-101	1.079E-02	3.019E-02	2.325E-02	3.019E-02	NOT IDENT.
SB-125	7.217E-02	8.349E-02	7.299E-02	8.349E-02	NOT IDENT.
PO-209	-2.959E-01	6.838E+00	5.684E+00	6.838E+00	NOT IDENT.
PA-233	-5.873E-03	5.082E-02	4.277E-02	5.082E-02	NOT IDENT.
NP-236	3.627E-02	4.559E-02	3.332E-02	4.559E-02	NOT IDENT.
NP-239	1.128E-01	1.659E-01	1.379E-01	1.659E-01	NOT IDENT.
AM-246	-1.016E-02	1.327E-01	1.083E-01	1.327E-01	NOT IDENT.
CF-249	-9.783E-03	3.393E-02	2.789E-02	3.393E-02	NOT IDENT.

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	301.0060
63.29	369.6413
74.66	422.2146
74.81	422.3535
74.81	422.3535
77.11	424.4771
77.11	424.4771
86.48	328.9391
87.30	329.4771
87.30	329.4771
92.58	332.8795
98.44	265.6944
103.76	268.2486
105.31	267.5635
129.07	286.4536
143.76	281.1477
198.00	238.1604
209.25	230.2640
228.18	167.2821
238.63	182.4647
242.00	183.0649
269.46	164.7619
270.25	164.8783
277.36	187.9651
295.22	162.5835
300.09	163.2433
312.17	148.7303
338.32	165.5033
351.93	151.4853
387.59	131.6678
409.46	126.8740
427.87	103.0951
463.00	107.3243
510.77	94.9746
583.19	95.4520
609.31	88.0834
661.66	77.0389
727.33	77.8955
763.13	78.1228
768.36	89.0320
785.37	66.7600
794.95	62.3561
806.17	85.9939
831.80	92.8069
860.56	63.9084
896.60	55.0740
911.20	42.7303
934.06	46.9816
964.77	52.4126
968.97	52.4850
1001.03	53.3685
1078.86	51.2598
1120.29	41.5156
1155.19	47.1775
1173.23	57.9568
1238.11	46.4860
1280.96	37.9753
1332.51	34.0849
1377.67	33.3589
1401.50	31.6896
1407.98	37.3405
1460.80	26.4699
1509.23	22.9434
1588.20	31.1354
1620.50	18.1712
1729.60	13.7467
1764.49	10.0944

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701004

Total Uranium Activity	4.2546E-02	ug/g
Total Uranium Counting Unc.	9.8989E-02	ug/g
Total Uranium Tpu	9.8989E-08	ug/g
Total Uranium Mda	5.6886E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:52:16.51

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701005.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:37:40
Sample ID        : G198701005           Sample quantity  : 1.15530E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.36  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	45.94*	33	436	2.81	91.82	87	10	2.29E-03	126.1	
2	2	74.93	312	365	0.93	149.82	145	13	2.17E-02	11.2	1.83E+00
3	2	77.17*	485	294	0.91	154.30	145	13	3.37E-02	7.5	
4	0	86.43	304	603	1.18	172.82	166	12	2.11E-02	17.1	
5	4	89.99	145	149	0.91	179.94	178	15	1.01E-02	13.3	3.14E+00
6	4	92.83*	190	342	1.25	185.62	178	15	1.32E-02	20.6	
7	0	128.68	64	319	1.78	257.32	255	7	4.42E-03	48.4	
8	0	132.21	41	307	2.08	264.38	261	7	2.84E-03	72.7	
9	0	153.84	89	305	2.55	307.65	304	8	6.18E-03	35.8	
10	0	185.82*	185	497	0.90	371.63	366	11	1.28E-02	26.2	
11	0	209.10	130	304	0.79	418.19	414	9	9.03E-03	25.7	
12	6	226.91	63	142	1.55	453.82	451	15	4.39E-03	30.8	8.33E-01
13	6	230.40	61	297	1.95	460.81	451	15	4.22E-03	54.8	
14	2	238.66*	951	219	1.02	477.31	470	19	6.60E-02	4.3	1.11E+00
15	2	241.81	285	261	1.35	483.62	470	19	1.98E-02	11.8	
16	0	258.23	48	183	1.95	516.47	514	7	3.37E-03	48.7	
17	0	270.10	119	244	1.26	540.22	536	10	8.25E-03	26.2	
18	2	274.77	27	102	1.07	549.55	547	13	1.89E-03	55.0	2.46E+00
19	2	277.13	61	186	1.24	554.28	547	13	4.22E-03	38.7	
20	0	295.29*	460	225	1.08	590.60	586	9	3.19E-02	8.1	
21	0	300.03	48	174	1.42	600.09	596	7	3.34E-03	47.7	
22	0	338.28	159	212	1.19	676.61	673	9	1.10E-02	18.4	
23	0	351.87*	771	212	1.19	703.79	698	11	5.35E-02	5.3	
24	0	383.49	26	146	0.97	767.04	762	8	1.79E-03	84.7	
25	0	400.00	35	122	1.48	800.06	797	7	2.40E-03	55.4	
26	0	409.49	40	139	1.18	819.06	814	8	2.79E-03	53.4	
27	0	433.59*	34	82	1.48	867.26	864	7	2.37E-03	55.6	
28	0	452.47	44	151	3.27	905.04	899	11	3.07E-03	55.8	
29	0	463.03	99	157	2.14	926.16	921	13	6.89E-03	28.0	
30	0	510.81*	88	212	1.75	1021.75	1014	16	6.13E-03	47.5	
31	0	543.70	27	79	1.45	1087.55	1084	8	1.89E-03	60.0	
32	0	569.67*	34	93	1.26	1139.50	1135	10	2.35E-03	95.6	
33	0	583.23*	216	123	1.34	1166.64	1162	10	1.50E-02	13.0	
34	0	609.12*	535	132	1.41	1218.43	1213	11	3.72E-02	6.3	
35	0	661.56*	212	78	1.50	1323.35	1318	10	1.47E-02	10.8	
36	0	727.46	68	137	1.57	1455.20	1445	15	4.75E-03	39.4	
37	0	741.12	31	80	4.50	1482.53	1474	14	2.17E-03	63.5	
38	0	767.85	65	72	2.08	1536.00	1531	11	4.48E-03	28.3	

Sample ID : G198701005 Acquisition date : 13-DEC-2007 05:37:40

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	794.09	36	79	3.64	1588.50	1583	12	2.47E-03	52.6	
40	0	839.73	70	99	7.45	1679.82	1670	19	4.86E-03	36.2	
41	0	846.05	13	41	1.43	1692.48	1688	7	8.98E-04	87.4	
42	0	861.17	45	76	1.52	1722.73	1714	12	3.14E-03	41.6	
43	0	866.60	13	59	3.31	1733.60	1727	11	9.13E-04	115.6	
44	0	911.25*	187	60	1.59	1822.92	1814	16	1.30E-02	12.4	
45	0	923.69	21	43	4.29	1847.82	1842	13	1.45E-03	68.0	
46	0	933.47	70	88	5.42	1867.39	1856	22	4.89E-03	36.0	
47	0	954.11	9	34	1.13	1908.69	1902	9	6.19E-04	124.9	
48	5	964.45	47	54	2.91	1929.38	1922	21	3.30E-03	39.7	1.11E+00
49	5	968.70	113	39	1.70	1937.88	1922	21	7.86E-03	14.2	
50	0	1001.47*	15	56	2.39	2003.45	1995	15	1.05E-03	123.0	
51	0	1090.84	8	29	0.62	2182.27	2174	10	5.36E-04	140.9	
52	0	1094.16	19	34	3.46	2188.92	2183	11	1.35E-03	61.9	
53	0	1110.52	15	17	1.48	2221.65	2218	7	1.05E-03	52.5	
54	0	1120.05	117	45	2.47	2240.74	2232	15	8.12E-03	15.5	
55	0	1193.25	32	17	5.05	2387.20	2381	13	2.25E-03	31.1	
56	0	1206.94	24	38	3.37	2414.61	2409	12	1.68E-03	55.2	
57	0	1238.05*	59	42	1.22	2476.87	2471	13	4.10E-03	26.9	
58	0	1279.93	48	15	1.67	2560.67	2553	15	3.33E-03	22.8	
59	0	1302.82	20	22	3.63	2606.48	2599	13	1.40E-03	53.3	
60	3	1375.22	20	8	2.26	2751.37	2748	14	1.37E-03	37.9	1.43E+00
61	3	1377.53	53	12	2.08	2756.00	2748	14	3.65E-03	19.3	
62	0	1460.35*	298	48	1.77	2921.73	2912	17	2.07E-02	8.1	
63	0	1597.83	19	3	0.49	3196.90	3191	11	1.34E-03	28.2	
64	0	1699.45	7	17	1.00	3400.28	3390	17	5.09E-04	133.8	
65	0	1729.15	31	23	1.31	3459.72	3450	19	2.13E-03	42.1	
66	0	1763.98	114	15	2.15	3529.44	3523	14	7.95E-03	11.7	
67	0	1806.80	9	8	1.42	3615.15	3608	11	6.11E-04	71.6	
68	0	1847.01	22	7	2.22	3695.63	3690	10	1.51E-03	31.7	
69	0	1871.78	6	14	0.76	3745.22	3733	14	4.41E-04	130.8	
70	0	1874.87	4	12	1.40	3751.40	3746	11	3.04E-04	155.4	
71	0	1928.17	6	10	2.42	3858.10	3846	14	3.99E-04	126.3	
72	0	1974.42	10	6	0.93	3950.68	3943	13	7.12E-04	59.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701005       *
* Acquisition date : 13-DEC-2007 05:37:40 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:08.36     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701005           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1553E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.378E+00	7.560E-01	3.438E-01	0.000E+00
CS-137	1.938E-01	4.237E-02	4.065E-02	0.000E+00
TL-208	1.775E-01	4.623E-02	3.988E-02	0.000E+00
BI-212	4.867E-01	3.769E-01	2.869E-01	0.000E+00
PB-212	7.482E-01	7.517E-02	5.790E-02	0.000E+00
BI-214	8.363E-01	1.138E-01	8.286E-02	0.000E+00
PB-214	9.435E-01	1.102E-01	7.309E-02	0.000E+00
RA-223	3.243E-01	1.677E-01	1.756E-01	0.000E+00
AC-228	7.452E-01	1.906E-01	1.430E-01	0.000E+00
PA-234M	2.015E+00	4.862E+00	4.740E+00	0.000E+00
NP-237	7.503E-01	2.579E-01	1.819E-01	0.000E+00
NP-239	1.929E-01	1.169E-01	2.199E-01	0.000E+00
AM-243	1.788E-01	4.113E-02	5.111E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	1.304E-03		2.701E-02	4.574E-02	0.000E+00	NOT IDENT.
RH-101	1.541E-02		2.233E-02	3.438E-02	0.000E+00	NOT IDENT.
SB-125	-1.376E-02		6.653E-02	1.070E-01	0.000E+00	NOT IDENT.
EU-155	1.887E-02		5.460E-02	9.780E-02	0.000E+00	NOT IDENT.
PO-209	-9.354E-01		5.324E+00	8.692E+00	0.000E+00	NOT IDENT.
BI-211	3.816E-03		8.468E-01	1.224E+00	0.000E+00	NOT IDENT.
PA-233	-2.375E-02		3.924E-02	6.611E-02	0.000E+00	NOT IDENT.
TH-234	0.000E+00		4.065E-01	6.067E-01	0.000E+00	FAIL ABUN
U-235	-6.843E-02		1.286E-01	1.871E-01	0.000E+00	NOT IDENT.
NP-236	2.933E-02		3.494E-02	5.815E-02	0.000E+00	NOT IDENT.
AM-241	3.179E-02		9.053E-02	1.532E-01	0.000E+00	NOT IDENT.
CM-243	-1.398E-02		4.923E-02	8.615E-02	0.000E+00	NOT IDENT.
AM-246	5.212E-02		7.581E-02	1.376E-01	0.000E+00	NOT IDENT.
CF-249	8.446E-03		2.874E-02	4.399E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:52:17.51

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701005.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:37:40
Sample ID        : G198701005           Sample quantity  : 1.15530E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.36  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	298	10.66*	1.037E+00	4.378E+00	4.378E+00	17.62
CS-137	661.66	212	85.10*	2.102E+00	1.929E-01	1.938E-01	22.31
TL-208	277.36	61	6.31	4.256E+00	3.674E-01	3.674E-01	77.64
	510.77	88	22.60	2.614E+00	2.426E-01	2.426E-01	95.23
	583.19	216	84.50*	2.341E+00	1.775E-01	1.775E-01	26.58
	763.13	------	1.81	1.854E+00	------	Line Not Found	------
	860.56	45	12.42	1.663E+00	3.562E-01	3.562E-01	83.58
BI-212	727.33	68	11.80*	1.935E+00	4.867E-01	4.867E-01	79.03
	785.37	------	1.10	1.807E+00	------	Line Not Found	------
	1620.50	------	1.49	9.597E-01	------	Line Not Found	------
PB-212	74.81	312	10.40	4.163E+00	1.173E+00	1.173E+00	23.47
	77.11	485	17.50	4.420E+00	1.019E+00	1.019E+00	16.52
	87.30	304	7.81	5.309E+00	1.191E+00	1.191E+00	35.07
	238.63	951	43.30*	4.766E+00	7.482E-01	7.482E-01	10.25
	300.09	48	3.28	4.002E+00	5.950E-01	5.950E-01	95.52
BI-214	609.31	535	46.10*	2.256E+00	8.362E-01	8.363E-01	13.89
	768.36	65	4.94	1.844E+00	1.150E+00	1.150E+00	56.97
	806.17	------	1.22	1.765E+00	------	Line Not Found	------
	934.06	70	3.03	1.544E+00	2.444E+00	2.445E+00	72.40
	1120.29	117	15.10	1.306E+00	9.637E-01	9.638E-01	31.72
	1155.19	------	1.63	1.270E+00	------	Line Not Found	------
	1238.11	59	5.79	1.193E+00	1.389E+00	1.389E+00	54.22
	1280.96	48	1.43	1.159E+00	4.706E+00	4.706E+00	45.99
	1377.67	53	4.00	1.088E+00	1.961E+00	1.961E+00	39.31
	1401.50	------	1.27	1.073E+00	------	Line Not Found	------
	1407.98	------	2.15	1.069E+00	------	Line Not Found	------
	1509.23	------	2.11	1.011E+00	------	Line Not Found	------
	1729.60	31	2.92	9.198E-01	1.857E+00	1.857E+00	84.40
	1764.49	114	15.40	9.089E-01	1.328E+00	1.328E+00	24.14
PB-214	74.81	312	6.44	4.163E+00	1.894E+00	1.894E+00	23.47
	77.11	485	10.80	4.420E+00	1.650E+00	1.651E+00	16.52
	87.30	304	4.84	5.309E+00	1.922E+00	1.922E+00	35.07

Sample ID : G198701005 Acquisition date : 13-DEC-2007 05:37:40

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	285	7.43	4.720E+00	1.321E+00	1.321E+00	24.23
	295.22	460	19.30	4.052E+00	9.557E-01	9.558E-01	17.28
	351.93	771	37.60*	3.530E+00	9.434E-01	9.435E-01	11.92
RA-223	269.46	119	13.70*	4.341E+00	3.243E-01	3.243E-01	52.77
AC-228	129.07	64	2.42	6.531E+00	6.540E-01	6.540E-01	96.95
	209.25	130	3.89	5.239E+00	1.037E+00	1.037E+00	51.69
	270.25	119	3.46	4.341E+00	1.284E+00	1.284E+00	52.77
	338.32	159	11.27	3.641E+00	6.297E-01	6.297E-01	37.12
	409.46	40	1.92	3.128E+00	1.085E+00	1.085E+00	106.92
	463.00	99	4.40	2.833E+00	1.293E+00	1.293E+00	56.31
	794.95	36	4.25	1.789E+00	7.592E-01	7.592E-01	105.37
	911.20	187	25.80*	1.579E+00	7.452E-01	7.452E-01	26.09
	964.77	47	4.99	1.499E+00	1.031E+00	1.031E+00	79.78
	968.97	113	15.80	1.493E+00	7.798E-01	7.798E-01	29.32
	1588.20	------	3.22	9.734E-01	------	Line Not Found	------
PA-234M	1001.03	15	0.84*	1.448E+00	2.015E+00	2.015E+00	246.20
NP-237	86.48	304	12.40*	5.309E+00	7.503E-01	7.503E-01	35.07
NP-239	228.18	63	10.76*	4.946E+00	1.929E-01	1.929E-01	61.84
AM-243	74.66	312	68.20*	4.163E+00	1.788E-01	1.788E-01	23.47

Flag: "*" = Keyline

Sample ID : G198701005 Acquisition date : 13-DEC-2007 05:37:40

Total number of lines in spectrum 72
Number of unidentified lines 35
Number of lines tentatively identified by NID 37 51.39%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.378E+00	4.378E+00	0.771E+00	17.62	
CS-137	9.47E+08S	1.00	1.929E-01	1.938E-01	0.432E-01	22.31	
TL-208	4.43E+17S	1.00	1.775E-01	1.775E-01	0.472E-01	26.58	
BI-212	4.43E+17S	1.00	4.867E-01	4.867E-01	3.846E-01	79.03	
PB-212	4.43E+17S	1.00	7.482E-01	7.482E-01	0.767E-01	10.25	
BI-214	5.05E+10S	1.00	8.362E-01	8.363E-01	1.161E-01	13.89	
PB-214	5.05E+10S	1.00	9.434E-01	9.435E-01	1.125E-01	11.92	
RA-223	1.04E+12S	1.00	3.243E-01	3.243E-01	1.712E-01	52.77	
AC-228	4.43E+17S	1.00	7.452E-01	7.452E-01	1.944E-01	26.09	
PA-234M	1.41E+17S	1.00	2.015E+00	2.015E+00	4.962E+00	246.20	
NP-237	6.75E+13S	1.00	7.503E-01	7.503E-01	2.631E-01	35.07	
NP-239	2.33E+11S	1.00	1.929E-01	1.929E-01	1.193E-01	61.84	
AM-243	2.33E+11S	1.00	1.788E-01	1.788E-01	0.420E-01	23.47	
			---	---			
		Total Activity :	1.197E+01	1.197E+01			

Grand Total Activity : 1.197E+01 1.197E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701005 Acquisition date : 13-DEC-2007 05:37:40

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	45.94	33	436	2.81	91.82	87	10	2.29E-03	****	5.36E-01	
4	89.99	145	149	0.91	179.94	178	15	1.01E-02	26.6	5.58E+00	
4	92.83	190	342	1.25	185.62	178	15	1.32E-02	41.2	5.76E+00	T
0	132.21	41	307	2.08	264.38	261	7	2.84E-03	****	6.51E+00	
0	153.84	89	305	2.55	307.65	304	8	6.18E-03	71.6	6.24E+00	
0	185.82	185	497	0.90	371.63	366	11	1.28E-02	52.4	5.66E+00	
6	230.40	61	297	1.95	460.81	451	15	4.22E-03	****	4.89E+00	
0	258.23	48	183	1.95	516.47	514	7	3.37E-03	97.5	4.49E+00	
2	274.77	27	102	1.07	549.55	547	13	1.89E-03	****	4.28E+00	
0	383.49	26	146	0.97	767.04	762	8	1.79E-03	****	3.30E+00	
0	400.00	35	122	1.48	800.06	797	7	2.40E-03	****	3.19E+00	
0	433.59	34	82	1.48	867.26	864	7	2.37E-03	****	2.99E+00	
0	452.47	44	151	3.27	905.04	899	11	3.07E-03	****	2.89E+00	
0	543.70	27	79	1.45	1087.55	1084	8	1.89E-03	****	2.48E+00	
0	569.67	34	93	1.26	1139.50	1135	10	2.35E-03	****	2.39E+00	
0	741.12	31	80	4.50	1482.53	1474	14	2.17E-03	****	1.90E+00	
0	839.73	70	99	7.45	1679.82	1670	19	4.86E-03	72.4	1.70E+00	
0	846.05	13	41	1.43	1692.48	1688	7	8.98E-04	****	1.69E+00	
0	866.60	13	59	3.31	1733.60	1727	11	9.13E-04	****	1.65E+00	
0	923.69	21	43	4.29	1847.82	1842	13	1.45E-03	****	1.56E+00	
0	954.11	9	34	1.13	1908.69	1902	9	6.19E-04	****	1.51E+00	
0	1090.84	8	29	0.62	2182.27	2174	10	5.36E-04	****	1.34E+00	
0	1094.16	19	34	3.46	2188.92	2183	11	1.35E-03	****	1.33E+00	
0	1110.52	15	17	1.48	2221.65	2218	7	1.05E-03	****	1.32E+00	
0	1193.25	32	17	5.05	2387.20	2381	13	2.25E-03	62.2	1.23E+00	
0	1206.94	24	38	3.37	2414.61	2409	12	1.68E-03	****	1.22E+00	
0	1302.82	20	22	3.63	2606.48	2599	13	1.40E-03	****	1.14E+00	
3	1375.22	20	8	2.26	2751.37	2748	14	1.37E-03	75.8	1.09E+00	
0	1597.83	19	3	0.49	3196.90	3191	11	1.34E-03	56.4	9.69E-01	
0	1699.45	7	17	1.00	3400.28	3390	17	5.09E-04	****	9.30E-01	
0	1806.80	9	8	1.42	3615.15	3608	11	6.11E-04	****	8.97E-01	
0	1847.01	22	7	2.22	3695.63	3690	10	1.51E-03	63.4	8.86E-01	
0	1871.78	6	14	0.76	3745.22	3733	14	4.41E-04	****	8.81E-01	
0	1874.87	4	12	1.40	3751.40	3746	11	3.04E-04	****	8.80E-01	
0	1928.17	6	10	2.42	3858.10	3846	14	3.99E-04	****	8.69E-01	
0	1974.42	10	6	0.93	3950.68	3943	13	7.12E-04	****	8.60E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701005            *
* Acquisition date : 13-DEC-2007 05:37:40 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:08.36     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701005           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1553E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.378E+00	7.560E-01	1.720E-01	7.560E-01
CS-137	1.938E-01	4.237E-02	2.034E-02	4.237E-02
TL-208	1.775E-01	4.623E-02	1.995E-02	4.623E-02
BI-212	4.867E-01	3.769E-01	1.435E-01	3.769E-01
PB-212	7.482E-01	7.517E-02	2.897E-02	7.517E-02
BI-214	8.363E-01	1.138E-01	4.145E-02	1.138E-01
PB-214	9.435E-01	1.102E-01	3.657E-02	1.102E-01
RA-223	3.243E-01	1.677E-01	8.787E-02	1.677E-01
AC-228	7.452E-01	1.906E-01	7.156E-02	1.906E-01
PA-234M	2.015E+00	4.862E+00	2.372E+00	4.862E+00
NP-237	7.503E-01	2.579E-01	9.099E-02	2.579E-01
NP-239	1.929E-01	1.169E-01	1.100E-01	1.169E-01
AM-243	1.788E-01	4.113E-02	2.557E-02	4.113E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.304E-03	2.701E-02	2.288E-02	2.701E-02	NOT IDENT.
RH-101	1.541E-02	2.233E-02	1.720E-02	2.233E-02	NOT IDENT.
SB-125	-1.376E-02	6.653E-02	5.355E-02	6.653E-02	NOT IDENT.
EU-155	1.887E-02	5.460E-02	4.893E-02	5.460E-02	NOT IDENT.
PO-209	-9.354E-01	5.324E+00	4.349E+00	5.324E+00	NOT IDENT.
BI-211	3.816E-03	8.468E-01	6.122E-01	8.468E-01	NOT IDENT.
PA-233	-2.375E-02	3.924E-02	3.307E-02	3.924E-02	NOT IDENT.
TH-234	9.921E-01	4.065E-01	3.035E-01	4.065E-01	FAIL ABUN
U-235	-6.843E-02	1.286E-01	9.360E-02	1.286E-01	NOT IDENT.
NP-236	2.933E-02	3.494E-02	2.909E-02	3.494E-02	NOT IDENT.
AM-241	3.179E-02	9.053E-02	7.664E-02	9.053E-02	NOT IDENT.
CM-243	-1.398E-02	4.923E-02	4.310E-02	4.923E-02	NOT IDENT.
AM-246	5.212E-02	7.581E-02	6.886E-02	7.581E-02	NOT IDENT.
CF-249	8.446E-03	2.874E-02	2.201E-02	2.874E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	207.0751
63.29	244.9454
74.66	345.4760
74.81	345.6412
74.81	345.6412
77.11	348.1548
77.11	348.1548
86.48	239.9406
87.30	240.5016
87.30	240.5016
92.58	237.6668
98.44	258.2649
103.76	267.4846
105.31	255.3091
129.07	294.1358
143.76	271.8922
198.00	237.3225
209.25	260.5109
228.18	231.2964
238.63	243.4031
242.00	244.4636
269.46	187.0356
270.25	173.3429
277.36	187.0116
295.22	211.1132
300.09	179.2480
312.17	189.7252
338.32	208.7695
351.93	161.4671
387.59	143.5568
409.46	130.3532
427.87	151.0004
463.00	140.9514
510.77	125.4935
583.19	107.9385
609.31	128.8450
661.66	91.0168
727.33	74.7388
763.13	92.6247
768.36	96.1758
785.37	83.2553
794.95	80.6113
806.17	84.0740
831.80	83.7004
860.56	103.8135
896.60	79.0778
911.20	59.4084
934.06	48.1915
964.77	60.7182
968.97	61.5434
1001.03	58.2845
1078.86	34.9028
1120.29	52.5112
1155.19	49.4063
1173.23	53.6058
1238.11	49.7721
1280.96	50.1573
1332.51	42.0160
1377.67	32.0437
1401.50	38.6862
1407.98	36.6634
1460.80	25.5127
1509.23	19.3865
1588.20	31.4599
1620.50	23.7514
1729.60	16.5832
1764.49	53.3531

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701005

Total Uranium Activity	-3.1663E-02	ug/g
Total Uranium Counting Unc.	5.9489E-02	ug/g
Total Uranium Tpu	5.9489E-08	ug/g
Total Uranium Mda	4.3311E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:52:54.01

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701006.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:38:20
Sample ID        : G198701006           Sample quantity  : 1.24840E+02 GRAM
Detector name    : GAM03                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.89  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.44*	80	557	1.28	126.77	122	10	5.53E-03	60.5	
2	2	74.87*	299	608	1.50	149.61	144	16	2.08E-02	16.6	1.49E+00
3	2	77.29*	545	580	1.43	154.43	144	16	3.79E-02	9.7	
4	0	83.89	52	459	1.03	167.62	165	7	3.63E-03	69.2	
5	0	86.65*	62	569	0.95	173.13	172	7	4.29E-03	67.0	
6	0	93.41*	145	966	1.45	186.64	181	14	1.01E-02	51.0	
7	0	128.81	74	399	1.46	257.36	254	8	5.11E-03	48.3	
8	0	144.28*	11	539	0.66	288.26	282	11	7.67E-04	424.4	
9	0	185.82*	204	553	1.33	371.24	364	14	1.42E-02	27.3	
10	0	198.94*	25	384	2.33	397.46	394	10	1.76E-03	154.1	
11	0	209.29	107	472	0.85	418.13	413	12	7.44E-03	41.6	
12	3	238.73*	1284	318	1.65	476.96	470	19	8.91E-02	4.0	1.26E+00
13	3	241.73	271	313	2.13	482.97	470	19	1.88E-02	16.4	
14	0	269.58	91	239	1.60	538.62	536	10	6.34E-03	33.2	
15	0	285.27	10	186	0.79	569.96	569	8	7.17E-04	230.8	
16	2	295.43*	337	277	1.62	590.26	584	20	2.34E-02	11.0	1.47E+00
17	2	300.22	81	165	1.61	599.83	584	20	5.64E-03	31.6	
18	0	303.42	18	183	0.60	606.22	603	8	1.22E-03	135.9	
19	0	328.71	58	190	1.32	656.75	653	9	4.00E-03	45.2	
20	0	338.34*	188	238	1.60	676.01	671	10	1.30E-02	17.8	
21	0	352.05*	724	228	1.98	703.40	695	15	5.03E-02	6.1	
22	0	464.01	82	162	2.26	927.17	921	15	5.73E-03	36.5	
23	0	510.99*	191	224	2.23	1021.07	1011	21	1.33E-02	24.4	
24	0	583.53*	378	162	2.26	1166.08	1156	19	2.62E-02	10.1	
25	0	609.76*	439	170	2.08	1218.52	1210	19	3.05E-02	9.0	
26	0	661.67	60	151	1.73	1322.30	1316	14	4.14E-03	45.6	
27	0	666.24	10	37	0.74	1331.45	1329	5	6.93E-04	101.8	
28	0	696.60	59	65	3.80	1392.15	1387	12	4.12E-03	29.8	
29	0	727.57	121	104	2.21	1454.07	1443	19	8.40E-03	22.2	
30	0	768.59	42	113	0.88	1536.08	1529	14	2.92E-03	55.7	
31	0	806.17	16	63	0.86	1611.24	1601	12	1.09E-03	104.7	
32	0	912.03*	247	91	1.92	1822.95	1814	17	1.72E-02	11.5	
33	0	933.69	69	39	4.27	1866.27	1859	17	4.77E-03	23.9	
34	1	965.49	72	71	2.66	1929.87	1924	24	4.98E-03	25.0	2.18E+00
35	1	969.59	127	74	2.66	1938.09	1924	24	8.80E-03	19.3	
36	0	1004.67	24	101	4.88	2008.26	1994	23	1.68E-03	110.6	
37	0	1022.82	16	68	4.14	2044.55	2032	18	1.13E-03	120.6	
38	0	1034.31	18	37	1.64	2067.53	2062	12	1.28E-03	69.2	

Sample ID : G198701006 Acquisition date : 13-DEC-2007 05:38:20

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1121.54	123	54	2.84	2242.06	2232	18	8.57E-03	16.6	
40	0	1206.25	20	27	3.97	2411.55	2405	12	1.41E-03	55.7	
41	0	1240.00	16	49	1.03	2479.07	2474	11	1.11E-03	90.1	
42	0	1265.25	23	15	3.40	2529.61	2523	12	1.61E-03	39.3	
43	0	1290.58	27	19	4.53	2580.30	2573	13	1.85E-03	39.2	
44	0	1378.59	27	36	1.94	2756.44	2745	18	1.87E-03	55.6	
45	0	1461.84*	416	42	3.02	2923.07	2912	21	2.89E-02	6.5	
46	0	1537.55	17	15	4.99	3074.65	3066	15	1.18E-03	55.3	
47	0	1542.91	23	6	3.94	3085.37	3080	12	1.60E-03	29.8	
48	0	1658.68	14	21	6.50	3317.15	3305	20	9.96E-04	81.0	
49	0	1731.50	28	19	2.98	3462.99	3453	15	1.94E-03	38.8	
50	1	1764.47	38	27	2.99	3529.00	3520	26	2.67E-03	40.2	1.48E+00
51	1	1767.46	45	27	2.99	3535.00	3520	26	3.14E-03	34.1	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701006       *
* Acquisition date : 13-DEC-2007 05:38:20 Detector SN#    :                 *
* Detector ID      : GAM03                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.89     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701006           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2484E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 28-MAR-2007 19:01:41 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.214E+00	7.302E-01	3.567E-01	0.000E+00
RH-101	9.689E-03	2.927E-02	3.556E-02	0.000E+00
CS-137	4.652E-02	4.167E-02	3.965E-02	0.000E+00
TL-208	2.653E-01	5.560E-02	3.842E-02	0.000E+00
BI-212	7.373E-01	3.258E-01	2.745E-01	0.000E+00
PB-212	8.908E-01	9.028E-02	5.862E-02	0.000E+00
BI-214	5.870E-01	1.106E-01	7.383E-02	0.000E+00
PB-214	7.655E-01	1.039E-01	7.037E-02	0.000E+00
RA-223	2.181E-01	1.424E-01	1.765E-01	0.000E+00
AC-228	8.475E-01	2.120E-01	1.349E-01	0.000E+00
TH-234	6.456E-01	6.479E-01	5.021E-01	0.000E+00
U-235	2.301E-02	1.914E-01	2.118E-01	0.000E+00
NP-237	1.285E-01	1.691E-01	2.308E-01	0.000E+00
AM-243	1.383E-01	4.624E-02	5.031E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-1.612E-02		2.584E-02	4.144E-02	0.000E+00	NOT IDENT.
SB-125	-4.077E-02		5.984E-02	1.002E-01	0.000E+00	NOT IDENT.
EU-155	-4.417E-02		6.230E-02	1.058E-01	0.000E+00	NOT IDENT.
PO-209	2.725E+00		4.975E+00	8.689E+00	0.000E+00	NOT IDENT.
BI-211	-4.174E-01		6.518E-01	1.052E+00	0.000E+00	NOT IDENT.
PA-233	3.643E-03		3.893E-02	6.654E-02	0.000E+00	NOT IDENT.
PA-234M	2.928E+00		2.805E+00	5.034E+00	0.000E+00	NOT IDENT.
NP-236	-5.308E-03		4.299E-02	6.183E-02	0.000E+00	NOT IDENT.
NP-239	1.088E-01		1.388E-01	2.484E-01	0.000E+00	NOT IDENT.
AM-241	2.774E-02		9.327E-02	1.503E-01	0.000E+00	NOT IDENT.
CM-243	-5.052E-02		5.684E-02	9.593E-02	0.000E+00	NOT IDENT.
AM-246	8.262E-02		8.205E-02	1.508E-01	0.000E+00	NOT IDENT.
CF-249	1.298E-02		2.484E-02	4.265E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:52:54.89

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701006.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 05:38:20
Sample ID        : G198701006           Sample quantity  : 1.24840E+02 GRAM
Detector name    : GAM03                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.89  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	416	10.66*	1.126E+00	5.214E+00	5.214E+00	14.29
RH-101	198.00	25	73.00*	5.633E+00	9.272E-03	9.689E-03	308.31
CS-137	661.66	60	85.10*	2.274E+00	4.630E-02	4.652E-02	91.40
TL-208	277.36	------	6.31	4.504E+00	------	Line Not Found	------
	510.77	191	22.60	2.828E+00	4.490E-01	4.490E-01	49.27
	583.19	378	84.50*	2.533E+00	2.653E-01	2.653E-01	21.38
	763.13	------	1.81	2.003E+00	------	Line Not Found	------
	860.56	------	12.42	1.795E+00	------	Line Not Found	------
BI-212	727.33	121	11.80*	2.091E+00	7.373E-01	7.373E-01	45.10
	785.37	------	1.10	1.952E+00	------	Line Not Found	------
	1620.50	------	1.49	1.050E+00	------	Line Not Found	------
PB-212	74.81	299	10.40	4.769E+00	9.071E-01	9.071E-01	34.11
	77.11	545	17.50	5.028E+00	9.314E-01	9.314E-01	20.91
	87.30	62	7.81	5.832E+00	2.040E-01	2.040E-01	134.28
	238.63	1284	43.30*	5.003E+00	8.908E-01	8.908E-01	10.34
	300.09	81	3.28	4.254E+00	8.750E-01	8.750E-01	63.57
BI-214	609.31	439	46.10*	2.441E+00	5.869E-01	5.870E-01	19.23
	768.36	42	4.94	1.990E+00	6.423E-01	6.424E-01	111.69
	806.17	16	1.22	1.906E+00	1.011E+00	1.011E+00	209.57
	934.06	69	3.03	1.664E+00	2.049E+00	2.049E+00	49.10
	1120.29	123	15.10	1.406E+00	8.735E-01	8.736E-01	34.25
	1155.19	------	1.63	1.369E+00	------	Line Not Found	------
	1238.11	16	5.79	1.286E+00	3.238E-01	3.238E-01	180.27
	1280.96	------	1.43	1.251E+00	------	Line Not Found	------
	1377.67	27	4.00	1.178E+00	8.617E-01	8.618E-01	111.26
	1401.50	------	1.27	1.162E+00	------	Line Not Found	------
	1407.98	------	2.15	1.158E+00	------	Line Not Found	------
	1509.23	------	2.11	1.100E+00	------	Line Not Found	------
	1729.60	28	2.92	1.012E+00	1.422E+00	1.422E+00	77.73
	1764.49	38	15.40	1.003E+00	3.736E-01	3.736E-01	80.69
PB-214	74.81	299	6.44	4.769E+00	1.465E+00	1.465E+00	34.11
	77.11	545	10.80	5.028E+00	1.509E+00	1.509E+00	20.91

Sample ID : G198701006 Acquisition date : 13-DEC-2007 05:38:20

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	62	4.84	5.832E+00	3.291E-01	3.292E-01	134.28
	242.00	271	7.43	4.961E+00	1.104E+00	1.105E+00	33.38
	295.22	337	19.30	4.304E+00	6.096E-01	6.097E-01	23.04
	351.93	724	37.60*	3.781E+00	7.654E-01	7.655E-01	13.85
RA-223	269.46	91	13.70*	4.597E+00	2.181E-01	2.181E-01	66.63
AC-228	129.07	74	2.42	6.758E+00	6.764E-01	6.764E-01	96.88
	209.25	107	3.89	5.458E+00	7.591E-01	7.591E-01	83.51
	270.25	91	3.46	4.597E+00	8.636E-01	8.636E-01	66.63
	338.32	188	11.27	3.895E+00	6.433E-01	6.433E-01	36.13
	409.46	------	1.92	3.370E+00	------	Line Not Found	------
	463.00	82	4.40	3.056E+00	9.221E-01	9.221E-01	73.24
	794.95	------	4.25	1.930E+00	------	Line Not Found	------
	911.20	247	25.80*	1.701E+00	8.475E-01	8.475E-01	25.53
	964.77	72	4.99	1.614E+00	1.340E+00	1.340E+00	51.12
	968.97	127	15.80	1.607E+00	7.499E-01	7.499E-01	39.95
	1588.20	------	3.22	1.063E+00	------	Line Not Found	------
TH-234	63.29	80	4.80	3.283E+00	7.596E-01	7.596E-01	121.27
	92.58	145	5.41*	6.233E+00	6.456E-01	6.456E-01	102.40
U-235	143.76	11	10.96*	6.585E+00	2.301E-02	2.301E-02	848.87
NP-237	86.48	62	12.40*	5.832E+00	1.285E-01	1.285E-01	134.28
AM-243	74.66	299	68.20*	4.769E+00	1.383E-01	1.383E-01	34.11

Flag: "*" = Keyline

Sample ID : G198701006 Acquisition date : 13-DEC-2007 05:38:20

Total number of lines in spectrum	51	
Number of unidentified lines	17	
Number of lines tentatively identified by NID	34	66.67%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.214E+00	5.214E+00	0.745E+00	14.29	
RH-101	1.04E+08S	1.04	9.272E-03	9.689E-03	29.87E-03	308.31	
CS-137	9.47E+08S	1.00	4.630E-02	4.652E-02	4.252E-02	91.40	
TL-208	4.43E+17S	1.00	2.653E-01	2.653E-01	0.567E-01	21.38	
BI-212	4.43E+17S	1.00	7.373E-01	7.373E-01	3.325E-01	45.10	
PB-212	4.43E+17S	1.00	8.908E-01	8.908E-01	0.921E-01	10.34	
BI-214	5.05E+10S	1.00	5.869E-01	5.870E-01	1.129E-01	19.23	
PB-214	5.05E+10S	1.00	7.654E-01	7.655E-01	1.061E-01	13.85	
RA-223	1.04E+12S	1.00	2.181E-01	2.181E-01	1.453E-01	66.63	
AC-228	4.43E+17S	1.00	8.475E-01	8.475E-01	2.164E-01	25.53	
TH-234	1.41E+17S	1.00	6.456E-01	6.456E-01	6.611E-01	102.40	
U-235	2.22E+16S	1.00	2.301E-02	2.301E-02	19.53E-02	848.87	
NP-237	6.75E+13S	1.00	1.285E-01	1.285E-01	1.725E-01	134.28	
AM-243	2.33E+11S	1.00	1.383E-01	1.383E-01	0.472E-01	34.11	
			---	---			
	Total Activity :		1.052E+01	1.052E+01			

Grand Total Activity : 1.052E+01 1.052E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701006 Acquisition date : 13-DEC-2007 05:38:20

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	83.89	52	459	1.03	167.62	165	7	3.63E-03	****	5.63E+00	
0	185.82	204	553	1.33	371.24	364	14	1.42E-02	54.5	5.86E+00	
0	285.27	10	186	0.79	569.96	569	8	7.17E-04	****	4.41E+00	
0	303.42	18	183	0.60	606.22	603	8	1.22E-03	****	4.22E+00	
0	328.71	58	190	1.32	656.75	653	9	4.00E-03	90.4	3.98E+00	
0	666.24	10	37	0.74	1331.45	1329	5	6.93E-04	****	2.26E+00	
0	696.60	59	65	3.80	1392.15	1387	12	4.12E-03	59.6	2.17E+00	
0	1004.67	24	101	4.88	2008.26	1994	23	1.68E-03	****	1.56E+00	
0	1022.82	16	68	4.14	2044.55	2032	18	1.13E-03	****	1.53E+00	
0	1034.31	18	37	1.64	2067.53	2062	12	1.28E-03	****	1.51E+00	
0	1206.25	20	27	3.97	2411.55	2405	12	1.41E-03	****	1.32E+00	
0	1265.25	23	15	3.40	2529.61	2523	12	1.61E-03	78.6	1.26E+00	
0	1290.58	27	19	4.53	2580.30	2573	13	1.85E-03	78.5	1.24E+00	
0	1537.55	17	15	4.99	3074.65	3066	15	1.18E-03	****	1.09E+00	
0	1542.91	23	6	3.94	3085.37	3080	12	1.60E-03	59.6	1.08E+00	
0	1658.68	14	21	6.50	3317.15	3305	20	9.96E-04	****	1.04E+00	
1	1767.46	45	27	2.99	3535.00	3520	26	3.14E-03	68.1	1.00E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701006            *
* Acquisition date : 13-DEC-2007 05:38:20 Detector SN#    :                 *
* Detector ID      : GAM03                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.89     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701006           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2484E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 28-MAR-2007 19:01:41 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.214E+00	7.302E-01	1.785E-01	7.302E-01
RH-101	9.689E-03	2.927E-02	1.779E-02	2.927E-02
CS-137	4.652E-02	4.167E-02	1.984E-02	4.167E-02
TL-208	2.653E-01	5.560E-02	1.922E-02	5.560E-02
BI-212	7.373E-01	3.258E-01	1.373E-01	3.258E-01
PB-212	8.908E-01	9.028E-02	2.933E-02	9.028E-02
BI-214	5.870E-01	1.106E-01	3.694E-02	1.106E-01
PB-214	7.655E-01	1.039E-01	3.521E-02	1.039E-01
RA-223	2.181E-01	1.424E-01	8.829E-02	1.424E-01
AC-228	8.475E-01	2.120E-01	6.747E-02	2.120E-01
TH-234	6.456E-01	6.479E-01	2.512E-01	6.479E-01
U-235	2.301E-02	1.914E-01	1.060E-01	1.914E-01
NP-237	1.285E-01	1.691E-01	1.155E-01	1.691E-01
AM-243	1.383E-01	4.624E-02	2.517E-02	4.624E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-1.612E-02	2.584E-02	2.073E-02	2.584E-02	NOT IDENT.
SB-125	-4.077E-02	5.984E-02	5.011E-02	5.984E-02	NOT IDENT.
EU-155	-4.417E-02	6.230E-02	5.291E-02	6.230E-02	NOT IDENT.
PO-209	2.725E+00	4.975E+00	4.347E+00	4.975E+00	NOT IDENT.
BI-211	-4.174E-01	6.518E-01	5.262E-01	6.518E-01	NOT IDENT.
PA-233	3.643E-03	3.893E-02	3.329E-02	3.893E-02	NOT IDENT.
PA-234M	2.928E+00	2.805E+00	2.519E+00	2.805E+00	NOT IDENT.
NP-236	-5.308E-03	4.299E-02	3.093E-02	4.299E-02	NOT IDENT.
NP-239	1.088E-01	1.388E-01	1.243E-01	1.388E-01	NOT IDENT.
AM-241	2.774E-02	9.327E-02	7.517E-02	9.327E-02	NOT IDENT.
CM-243	-5.052E-02	5.684E-02	4.799E-02	5.684E-02	NOT IDENT.
AM-246	8.262E-02	8.205E-02	7.546E-02	8.205E-02	NOT IDENT.
CF-249	1.298E-02	2.484E-02	2.134E-02	2.484E-02	NOT IDENT.

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                 2040 SAVAGE ROAD                          *
*                              CHARLESTON ,SC 29417                         *
*                        GAMMA SPECTROSCOPY BACKGROUND REPORT               *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	382.1012
63.29	398.0199
74.66	500.8056
74.81	500.9889
74.81	500.9889
77.11	503.7904
77.11	503.7904
86.48	526.2261
87.30	725.8275
87.30	725.8275
92.58	537.0831
98.44	416.1348
103.76	451.5870
105.31	439.0727
129.07	442.6852
143.76	450.0904
198.00	381.7930
209.25	358.9166
228.18	329.8651
238.63	314.4978
242.00	315.6223
269.46	241.6534
270.25	275.4001
277.36	282.0043
295.22	266.0818
300.09	243.5713
312.17	217.4553
338.32	236.9662
351.93	197.1686
387.59	173.1823
409.46	189.0136
427.87	193.2981
463.00	147.4365
510.77	121.0287
583.19	135.2415
609.31	138.1304
661.66	116.9308
727.33	92.2681
763.13	100.4041
768.36	108.2943
785.37	75.2864
794.95	86.3317
806.17	98.8078
831.80	100.3209
860.56	75.5931
896.60	85.7041
911.20	70.9619
934.06	68.4874
964.77	59.6776
968.97	56.9192
1001.03	62.7822
1078.86	53.5401
1120.29	58.0457
1155.19	63.4742
1173.23	74.4528
1238.11	75.3200
1280.96	56.5645
1332.51	45.5013
1377.67	54.5703
1401.50	47.3561
1407.98	45.3723
1460.80	37.6161
1509.23	41.2316
1588.20	36.3765
1620.50	31.8228
1729.60	23.7025
1764.49	16.9133

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701006

Total Uranium Activity	1.0645E-02	ug/g
Total Uranium Counting Unc.	8.8554E-02	ug/g
Total Uranium Tpu	8.8554E-08	ug/g
Total Uranium Mda	4.9027E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:53:32.48

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701007.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 06:55:20
Sample ID        : G198701007           Sample quantity  : 1.12090E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:02.58  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.69*	123	579	1.06	127.31	124	9	8.55E-03	38.4	
2	1	74.94*	551	506	1.24	149.79	142	17	3.83E-02	8.3	3.79E+00
3	1	77.16*	809	423	1.04	154.23	142	17	5.62E-02	5.7	
4	4	84.09*	138	682	1.67	168.06	163	30	9.58E-03	37.0	1.78E+00
5	4	87.34*	268	395	1.07	174.54	163	30	1.86E-02	13.6	
6	4	90.00	192	443	1.14	179.88	163	30	1.33E-02	19.9	
7	4	92.74*	266	423	1.22	185.34	163	30	1.85E-02	16.9	
8	0	129.26	125	537	1.55	258.29	253	10	8.66E-03	36.0	
9	0	143.62*	6	401	1.59	286.98	283	8	3.90E-04	675.5	
10	0	153.81	78	458	2.49	307.33	304	9	5.44E-03	50.4	
11	0	179.47	70	369	2.28	358.60	356	9	4.88E-03	50.4	
12	0	186.00*	258	515	1.31	371.65	366	11	1.79E-02	19.7	
13	0	209.14	149	388	1.39	417.88	414	9	1.04E-02	25.1	
14	2	238.65*	1464	262	1.11	476.84	472	17	1.02E-01	3.4	1.24E+00
15	2	241.75	334	323	1.49	483.04	472	17	2.32E-02	11.4	
16	0	268.58	161	578	7.42	536.64	526	20	1.12E-02	37.4	
17	0	277.69	86	194	2.25	554.84	551	8	5.98E-03	30.2	
18	0	282.57	34	229	1.40	564.60	562	9	2.38E-03	81.3	
19	0	288.47	49	190	1.32	576.39	573	8	3.39E-03	51.0	
20	1	295.26*	560	183	1.22	589.95	585	26	3.89E-02	6.1	1.29E+00
21	1	300.18	124	213	1.43	599.77	585	26	8.61E-03	23.2	
22	0	328.04	115	288	2.69	655.45	650	12	7.98E-03	31.1	
23	0	338.31	305	303	1.28	675.97	670	13	2.12E-02	13.1	
24	0	351.95*	875	262	1.36	703.23	697	14	6.08E-02	5.4	
25	0	462.90	127	124	1.08	924.98	920	11	8.79E-03	19.2	
26	0	466.68	18	94	1.44	932.52	931	7	1.23E-03	93.8	
27	0	511.06*	89	288	1.77	1021.25	1013	18	6.18E-03	53.4	
28	0	549.35	31	74	2.86	1097.77	1092	10	2.12E-03	56.1	
29	0	583.29*	482	133	1.38	1165.63	1158	16	3.35E-02	7.3	
30	0	609.45*	680	108	1.57	1217.93	1211	14	4.72E-02	5.3	
31	0	661.87	383	111	1.23	1322.73	1317	12	2.66E-02	7.5	
32	0	709.17	43	49	1.43	1417.31	1413	9	2.99E-03	33.1	
33	0	727.75*	133	90	1.62	1454.47	1448	13	9.22E-03	18.1	
34	0	762.93	32	64	3.17	1524.82	1518	12	2.24E-03	52.2	
35	0	769.04	48	87	1.81	1537.04	1532	9	3.36E-03	37.6	
36	0	773.42	23	38	1.60	1545.80	1542	7	1.57E-03	51.2	
37	0	795.63	66	80	1.18	1590.21	1585	12	4.60E-03	29.8	
38	0	861.07*	46	51	1.35	1721.08	1717	9	3.19E-03	33.7	

Sample ID : G198701007 Acquisition date : 13-DEC-2007 06:55:20

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	900.91	10	39	2.57	1800.78	1793	9	7.16E-04	112.8	
40	0	911.47*	345	73	1.46	1821.89	1815	15	2.40E-02	7.8	
41	0	935.13	20	50	1.57	1869.22	1864	8	1.36E-03	67.5	
42	1	965.10	53	62	1.84	1929.17	1920	23	3.69E-03	31.3	1.35E+00
43	1	969.35	192	49	1.59	1937.67	1920	23	1.33E-02	9.9	
44	0	1059.58	16	35	1.27	2118.19	2111	10	1.11E-03	73.6	
45	0	1121.28*	171	55	2.03	2241.65	2234	19	1.19E-02	13.4	
46	2	1155.32	40	29	2.17	2309.75	2301	21	2.77E-03	34.3	2.12E+00
47	2	1157.94	21	26	1.79	2315.00	2301	21	1.47E-03	56.6	
48	0	1239.90	64	54	1.71	2479.02	2471	16	4.44E-03	29.6	
49	0	1327.33	14	19	1.98	2654.01	2649	10	9.70E-04	65.2	
50	0	1334.68	47	33	5.48	2668.72	2659	22	3.26E-03	34.4	
51	0	1378.58	32	36	2.32	2756.61	2748	15	2.22E-03	45.2	
52	0	1407.41	40	52	7.82	2814.32	2800	26	2.78E-03	51.8	
53	0	1461.50*	555	38	1.79	2922.60	2917	16	3.85E-02	5.1	
54	0	1491.12	9	15	0.88	2981.90	2978	8	6.41E-04	83.9	
55	0	1503.73	13	19	1.10	3007.15	3000	11	9.01E-04	71.1	
56	0	1589.97	10	36	0.78	3179.85	3169	13	7.13E-04	124.0	
57	0	1594.58	15	33	0.99	3189.07	3182	15	1.05E-03	87.6	
58	0	1622.23	20	26	0.76	3244.44	3235	15	1.40E-03	59.5	
59	0	1631.47	10	14	1.41	3262.95	3257	9	6.60E-04	76.9	
60	0	1643.53	20	17	6.50	3287.11	3277	18	1.38E-03	54.8	
61	0	1664.59	4	23	1.69	3329.27	3320	11	2.93E-04	221.5	
62	0	1694.68	26	0	0.62	3389.54	3383	14	1.81E-03	19.6	
63	0	1729.45	33	13	2.06	3459.18	3451	17	2.30E-03	30.3	
64	0	1765.29*	126	19	1.76	3530.97	3524	16	8.78E-03	12.6	
65	0	1842.14	9	6	0.89	3684.93	3681	8	6.55E-04	55.1	
66	1	1848.17	33	3	2.03	3697.00	3689	16	2.30E-03	22.4	9.71E-01
67	1	1850.81	16	0	1.82	3702.28	3689	16	1.13E-03	23.4	
68	0	1979.07	3	8	0.56	3959.28	3954	9	2.24E-04	158.6	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701007       *
* Acquisition date : 13-DEC-2007 06:55:20 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:02.58     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701007           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1209E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	6.776E+00	8.758E-01	3.745E-01	0.000E+00
CS-137	2.932E-01	4.742E-02	3.567E-02	0.000E+00
TL-208	3.327E-01	5.192E-02	2.842E-02	0.000E+00
BI-212	7.926E-01	2.866E-01	2.453E-01	0.000E+00
PB-212	1.013E+00	8.852E-02	5.407E-02	0.000E+00
BI-214	8.913E-01	1.086E-01	6.368E-02	0.000E+00
PB-214	9.157E-01	1.087E-01	6.641E-02	0.000E+00
RA-223	3.818E-01	2.811E-01	1.865E-01	0.000E+00
AC-228	1.153E+00	2.055E-01	1.180E-01	0.000E+00
TH-234	1.107E+00	3.849E-01	4.331E-01	0.000E+00
U-235	1.159E-02	1.534E-01	1.870E-01	0.000E+00
NP-237	5.028E-01	1.458E-01	1.960E-01	0.000E+00
AM-243	2.169E-01	4.230E-02	4.300E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	4.183E-02	2.339E-02	4.450E-02	0.000E+00	NOT IDENT.
RH-101	-1.807E-03	2.129E-02	3.482E-02	0.000E+00	NOT IDENT.
SB-125	4.008E-02	5.571E-02	9.594E-02	0.000E+00	NOT IDENT.
EU-155	1.567E-03	5.674E-02	9.999E-02	0.000E+00	NOT IDENT.
PO-209	-7.902E-01	4.650E+00	6.584E+00	0.000E+00	NOT IDENT.
BI-211	-3.802E-01	5.477E-01	8.634E-01	0.000E+00	NOT IDENT.
PA-233	-1.398E-03	3.681E-02	6.177E-02	0.000E+00	NOT IDENT.
PA-234M	-1.175E+00	2.598E+00	3.910E+00	0.000E+00	NOT IDENT.
NP-236	3.528E-02	3.980E-02	5.904E-02	0.000E+00	NOT IDENT.
NP-239	2.866E-03	1.292E-01	2.208E-01	0.000E+00	NOT IDENT.
AM-241	4.073E-02	7.422E-02	1.131E-01	0.000E+00	NOT IDENT.
CM-243	5.993E-03	4.994E-02	8.830E-02	0.000E+00	NOT IDENT.
AM-246	4.906E-02	7.337E-02	1.289E-01	0.000E+00	NOT IDENT.
CF-249	1.330E-02	2.317E-02	3.974E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:53:33.55

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701007.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 06:55:20
Sample ID        : G198701007           Sample quantity  : 1.12090E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:02.58  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	555	10.66*	1.286E+00	6.776E+00	6.776E+00	13.19
CS-137	661.66	383	85.10*	2.582E+00	2.918E-01	2.932E-01	16.50
TL-208	277.36	86	6.31	5.041E+00	4.534E-01	4.534E-01	60.70
	510.77	89	22.60	3.200E+00	2.060E-01	2.060E-01	106.91
	583.19	482	84.50*	2.873E+00	3.327E-01	3.327E-01	15.92
	763.13	32	1.81	2.280E+00	1.311E+00	1.311E+00	104.79
	860.56	46	12.42	2.045E+00	3.024E-01	3.024E-01	67.99
BI-212	727.33	133	11.80*	2.377E+00	7.926E-01	7.926E-01	36.90
	785.37	------	1.10	2.222E+00	------	Line Not Found	------
	1620.50	20	1.49	1.195E+00	1.901E+00	1.901E+00	119.20
PB-212	74.81	551	10.40	6.240E+00	1.422E+00	1.422E+00	19.90
	77.11	809	17.50	6.458E+00	1.198E+00	1.198E+00	15.89
	87.30	268	7.81	7.201E+00	7.984E-01	7.984E-01	29.60
	238.63	1464	43.30*	5.590E+00	1.013E+00	1.013E+00	8.92
	300.09	124	3.28	4.772E+00	1.327E+00	1.327E+00	46.84
BI-214	609.31	680	46.10*	2.769E+00	8.912E-01	8.913E-01	12.43
	768.36	48	4.94	2.264E+00	7.254E-01	7.254E-01	75.70
	806.17	------	1.22	2.170E+00	------	Line Not Found	------
	934.06	20	3.03	1.897E+00	5.694E-01	5.695E-01	135.30
	1120.29	171	15.10	1.608E+00	1.181E+00	1.181E+00	27.54
	1155.19	40	1.63	1.565E+00	2.618E+00	2.618E+00	68.81
	1238.11	64	5.79	1.471E+00	1.257E+00	1.257E+00	59.56
	1280.96	------	1.43	1.431E+00	------	Line Not Found	------
	1377.67	32	4.00	1.346E+00	9.941E-01	9.942E-01	90.77
	1401.50	------	1.27	1.329E+00	------	Line Not Found	------
	1407.98	40	2.15	1.324E+00	2.354E+00	2.354E+00	103.98
	1509.23	------	2.11	1.256E+00	------	Line Not Found	------
	1729.60	33	2.92	1.149E+00	1.650E+00	1.650E+00	60.96
	1764.49	126	15.40	1.136E+00	1.210E+00	1.210E+00	26.12
PB-214	74.81	551	6.44	6.240E+00	2.296E+00	2.297E+00	19.90
	77.11	809	10.80	6.458E+00	1.942E+00	1.942E+00	15.89
	87.30	268	4.84	7.201E+00	1.288E+00	1.288E+00	29.60

Sample ID : G198701007 Acquisition date : 13-DEC-2007 06:55:20

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	334	7.43	5.542E+00	1.358E+00	1.358E+00	23.49
	295.22	560	19.30	4.828E+00	1.006E+00	1.006E+00	13.67
	351.93	875	37.60*	4.255E+00	9.156E-01	9.157E-01	12.11
RA-223	269.46	161	13.70*	5.159E+00	3.818E-01	3.818E-01	75.12
AC-228	129.07	125	2.42	7.642E+00	1.129E+00	1.129E+00	72.30
	209.25	149	3.89	6.088E+00	1.054E+00	1.054E+00	50.56
	270.25	161	3.46	5.159E+00	1.512E+00	1.512E+00	75.12
	338.32	305	11.27	4.379E+00	1.035E+00	1.035E+00	26.76
	409.46	------	1.92	3.801E+00	------	Line Not Found	------
	463.00	127	4.40	3.460E+00	1.392E+00	1.392E+00	38.81
	794.95	66	4.25	2.196E+00	1.187E+00	1.187E+00	60.18
	911.20	345	25.80*	1.942E+00	1.153E+00	1.153E+00	18.18
	964.77	53	4.99	1.843E+00	9.673E-01	9.673E-01	63.15
	968.97	192	15.80	1.835E+00	1.109E+00	1.109E+00	21.71
	1588.20	10	3.22	1.210E+00	4.413E-01	4.413E-01	248.09
TH-234	63.29	123	4.80	4.789E+00	8.973E-01	8.973E-01	77.66
	92.58	266	5.41*	7.449E+00	1.107E+00	1.107E+00	35.49
U-235	143.76	6	10.96*	7.401E+00	1.159E-02	1.159E-02	1350.94
NP-237	86.48	268	12.40*	7.201E+00	5.028E-01	5.028E-01	29.60
AM-243	74.66	551	68.20*	6.240E+00	2.168E-01	2.169E-01	19.90

Flag: "*" = Keyline

Sample ID : G198701007 Acquisition date : 13-DEC-2007 06:55:20

Total number of lines in spectrum	68	
Number of unidentified lines	28	
Number of lines tentatively identified by NID	40	58.82%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	6.776E+00	6.776E+00	0.894E+00	13.19	
CS-137	9.47E+08S	1.00	2.918E-01	2.932E-01	0.484E-01	16.50	
TL-208	4.43E+17S	1.00	3.327E-01	3.327E-01	0.530E-01	15.92	
BI-212	4.43E+17S	1.00	7.926E-01	7.926E-01	2.924E-01	36.90	
PB-212	4.43E+17S	1.00	1.013E+00	1.013E+00	0.090E+00	8.92	
BI-214	5.05E+10S	1.00	8.912E-01	8.913E-01	1.108E-01	12.43	
PB-214	5.05E+10S	1.00	9.156E-01	9.157E-01	1.109E-01	12.11	
RA-223	1.04E+12S	1.00	3.818E-01	3.818E-01	2.868E-01	75.12	
AC-228	4.43E+17S	1.00	1.153E+00	1.153E+00	0.210E+00	18.18	
TH-234	1.41E+17S	1.00	1.107E+00	1.107E+00	0.393E+00	35.49	
U-235	2.22E+16S	1.00	1.159E-02	1.159E-02	15.65E-02	1350.94	
NP-237	6.75E+13S	1.00	5.028E-01	5.028E-01	1.488E-01	29.60	
AM-243	2.33E+11S	1.00	2.168E-01	2.169E-01	0.432E-01	19.90	
			---	---			
		Total Activity :	1.439E+01	1.439E+01			
		Grand Total Activity :	1.439E+01	1.439E+01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701007 Acquisition date : 13-DEC-2007 06:55:20

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	84.09	138	682	1.67	168.06	163	30	9.58E-03	74.0	7.01E+00	
4	90.00	192	443	1.14	179.88	163	30	1.33E-02	39.8	7.33E+00	
0	153.81	78	458	2.49	307.33	304	9	5.44E-03	****	7.20E+00	
0	179.47	70	369	2.28	358.60	356	9	4.88E-03	****	6.67E+00	
0	186.00	258	515	1.31	371.65	366	11	1.79E-02	39.5	6.53E+00	
0	282.57	34	229	1.40	564.60	562	9	2.38E-03	****	4.98E+00	
0	288.47	49	190	1.32	576.39	573	8	3.39E-03	****	4.91E+00	
0	328.04	115	288	2.69	655.45	650	12	7.98E-03	62.1	4.48E+00	
0	466.68	18	94	1.44	932.52	931	7	1.23E-03	****	3.44E+00	
0	549.35	31	74	2.86	1097.77	1092	10	2.12E-03	****	3.02E+00	
0	709.17	43	49	1.43	1417.31	1413	9	2.99E-03	66.3	2.43E+00	
0	773.42	23	38	1.60	1545.80	1542	7	1.57E-03	****	2.25E+00	
0	900.91	10	39	2.57	1800.78	1793	9	7.16E-04	****	1.96E+00	
0	1059.58	16	35	1.27	2118.19	2111	10	1.11E-03	****	1.69E+00	
2	1157.94	21	26	1.79	2315.00	2301	21	1.47E-03	****	1.56E+00	
0	1327.33	14	19	1.98	2654.01	2649	10	9.70E-04	****	1.39E+00	
0	1334.68	47	33	5.48	2668.72	2659	22	3.26E-03	68.8	1.38E+00	
0	1491.12	9	15	0.88	2981.90	2978	8	6.41E-04	****	1.27E+00	
0	1503.73	13	19	1.10	3007.15	3000	11	9.01E-04	****	1.26E+00	
0	1594.58	15	33	0.99	3189.07	3182	15	1.05E-03	****	1.21E+00	
0	1631.47	10	14	1.41	3262.95	3257	9	6.60E-04	****	1.19E+00	
0	1643.53	20	17	6.50	3287.11	3277	18	1.38E-03	****	1.18E+00	
0	1664.59	4	23	1.69	3329.27	3320	11	2.93E-04	****	1.18E+00	
0	1694.68	26	0	0.62	3389.54	3383	14	1.81E-03	39.2	1.16E+00	
0	1842.14	9	6	0.89	3684.93	3681	8	6.55E-04	****	1.11E+00	
1	1848.17	33	3	2.03	3697.00	3689	16	2.30E-03	44.8	1.11E+00	
1	1850.81	16	0	1.82	3702.28	3689	16	1.13E-03	46.8	1.11E+00	
0	1979.07	3	8	0.56	3959.28	3954	9	2.24E-04	****	1.08E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701007            *
* Acquisition date : 13-DEC-2007 06:55:20 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:02.58     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701007           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1209E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	6.776E+00	8.758E-01	1.874E-01	8.758E-01
CS-137	2.932E-01	4.742E-02	1.784E-02	4.742E-02
TL-208	3.327E-01	5.192E-02	1.422E-02	5.192E-02
BI-212	7.926E-01	2.866E-01	1.227E-01	2.866E-01
PB-212	1.013E+00	8.852E-02	2.705E-02	8.852E-02
BI-214	8.913E-01	1.086E-01	3.186E-02	1.086E-01
PB-214	9.157E-01	1.087E-01	3.323E-02	1.087E-01
RA-223	3.818E-01	2.811E-01	9.333E-02	2.811E-01
AC-228	1.153E+00	2.055E-01	5.904E-02	2.055E-01
TH-234	1.107E+00	3.849E-01	2.167E-01	3.849E-01
U-235	1.159E-02	1.534E-01	9.357E-02	1.534E-01
NP-237	5.028E-01	1.458E-01	9.805E-02	1.458E-01
AM-243	2.169E-01	4.230E-02	2.151E-02	4.230E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	4.183E-02	2.339E-02	2.226E-02	2.339E-02	NOT IDENT.
RH-101	-1.807E-03	2.129E-02	1.742E-02	2.129E-02	NOT IDENT.
SB-125	4.008E-02	5.571E-02	4.800E-02	5.571E-02	NOT IDENT.
EU-155	1.567E-03	5.674E-02	5.002E-02	5.674E-02	NOT IDENT.
PO-209	-7.902E-01	4.650E+00	3.294E+00	4.650E+00	NOT IDENT.
BI-211	-3.802E-01	5.477E-01	4.319E-01	5.477E-01	NOT IDENT.
PA-233	-1.398E-03	3.681E-02	3.090E-02	3.681E-02	NOT IDENT.
PA-234M	-1.175E+00	2.598E+00	1.956E+00	2.598E+00	NOT IDENT.
NP-236	3.528E-02	3.980E-02	2.954E-02	3.980E-02	NOT IDENT.
NP-239	2.866E-03	1.292E-01	1.105E-01	1.292E-01	NOT IDENT.
AM-241	4.073E-02	7.422E-02	5.658E-02	7.422E-02	NOT IDENT.
CM-243	5.993E-03	4.994E-02	4.418E-02	4.994E-02	NOT IDENT.
AM-246	4.906E-02	7.337E-02	6.446E-02	7.337E-02	NOT IDENT.
CF-249	1.330E-02	2.317E-02	1.988E-02	2.317E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	405.4167
63.29	472.6116
74.66	526.4451
74.81	526.5508
74.81	526.5508
77.11	528.1589
77.11	528.1589
86.48	480.6818
87.30	481.1646
87.30	481.1646
92.58	484.2151
98.44	384.7773
103.76	381.8110
105.31	403.5107
129.07	412.5019
143.76	368.7771
198.00	344.5258
209.25	328.1305
228.18	301.3106
238.63	276.9631
242.00	277.5634
269.46	280.3268
270.25	280.4555
277.36	269.1821
295.22	210.6216
300.09	211.1960
312.17	200.3336
338.32	219.6957
351.93	183.6511
387.59	154.9980
409.46	159.7789
427.87	137.3056
463.00	114.1324
510.77	119.6925
583.19	78.1270
609.31	108.5192
661.66	100.0401
727.33	78.0258
763.13	92.4882
768.36	68.2517
785.37	65.6472
794.95	62.2231
806.17	67.0189
831.80	75.4359
860.56	57.0181
896.60	65.6395
911.20	57.7779
934.06	47.9180
964.77	53.4219
968.97	53.4765
1001.03	49.7473
1078.86	45.3768
1120.29	53.2520
1155.19	46.1452
1173.23	36.6280
1238.11	52.7773
1280.96	48.6437
1332.51	30.1978
1377.67	38.3391
1401.50	28.9838
1407.98	25.3916
1460.80	43.9485
1509.23	24.6272
1588.20	29.1235
1620.50	21.4736
1729.60	14.9017
1764.49	18.8364

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701007

Total Uranium Activity	5.3617E-03	ug/g
Total Uranium Counting Unc.	7.0985E-02	ug/g
Total Uranium Tpu	7.0985E-08	ug/g
Total Uranium Mda	4.3294E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:54:09.43

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701008.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:36:26
Sample ID        : G198701008           Sample quantity  : 1.15010E+02 GRAM
Detector name    : GAM11                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.94  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.10*	18	266	0.77	91.67	89	6	1.22E-03	170.8	
2	0	63.09*	73	440	0.74	125.68	122	8	5.04E-03	55.1	
3	3	74.76*	335	350	0.85	149.04	145	16	2.33E-02	10.5	1.05E+00
4	3	77.02*	565	385	0.92	153.56	145	16	3.92E-02	7.2	
5	4	84.15*	69	443	1.26	167.83	163	28	4.82E-03	55.8	1.11E+00
6	4	87.09*	268	418	1.27	173.72	163	28	1.86E-02	15.0	
7	4	89.80	164	346	1.14	179.13	163	28	1.14E-02	20.6	
8	4	92.65*	264	324	1.13	184.84	163	28	1.83E-02	15.4	
9	0	99.08*	19	244	1.39	197.71	196	6	1.33E-03	143.6	
10	0	115.75	73	355	2.46	231.09	226	9	5.06E-03	48.1	
11	0	129.20	74	293	0.96	258.00	254	7	5.12E-03	40.4	
12	0	174.48	25	233	0.86	348.64	347	7	1.75E-03	103.0	
13	0	185.77*	230	357	1.12	371.25	367	9	1.60E-02	17.7	
14	0	209.55	149	334	1.06	418.84	413	11	1.03E-02	25.2	
15	4	238.59*	1275	206	0.99	476.96	472	17	8.86E-02	3.4	3.83E+00
16	4	241.58	291	243	1.57	482.95	472	17	2.02E-02	13.5	
17	0	270.12*	119	220	0.91	540.09	535	11	8.29E-03	26.5	
18	0	295.21*	415	184	1.15	590.30	586	10	2.88E-02	8.3	
19	0	299.98	102	149	1.80	599.85	596	8	7.05E-03	23.1	
20	0	303.42	20	148	1.36	606.73	605	7	1.37E-03	104.2	
21	0	321.14	24	147	1.64	642.21	639	8	1.68E-03	88.7	
22	0	328.62	54	126	2.24	657.17	654	7	3.76E-03	37.1	
23	0	338.34	239	193	1.11	676.64	672	9	1.66E-02	12.3	
24	0	351.92*	625	202	1.19	703.82	697	13	4.34E-02	6.4	
25	4	407.97	32	75	1.23	816.00	807	22	2.24E-03	49.8	3.09E+00
26	4	411.99	38	88	1.80	824.05	807	22	2.65E-03	49.1	
27	0	422.47	7	117	1.08	845.02	839	8	4.98E-04	264.6	
28	0	462.60*	78	108	1.21	925.33	921	10	5.43E-03	28.1	
29	0	510.87*	138	166	1.84	1021.94	1015	16	9.57E-03	28.6	
30	0	559.84	31	98	2.60	1119.96	1112	12	2.18E-03	65.8	
31	0	583.19*	338	146	1.24	1166.68	1160	13	2.35E-02	9.9	
32	0	609.30*	462	121	1.44	1218.94	1212	15	3.21E-02	7.3	
33	0	652.06*	17	38	1.54	1304.52	1302	6	1.16E-03	76.8	
34	0	661.86	328	117	1.23	1324.13	1318	12	2.28E-02	8.6	
35	0	703.85	29	66	1.18	1408.16	1402	10	2.01E-03	56.8	
36	0	727.68	97	93	1.63	1455.86	1450	15	6.75E-03	24.3	
37	0	795.71	75	68	2.28	1592.01	1585	17	5.24E-03	28.1	
38	0	806.61	16	33	0.50	1613.82	1611	7	1.10E-03	70.5	

Sample ID : G198701008 Acquisition date : 13-DEC-2007 07:36:26

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	861.24*	23	72	1.43	1723.15	1719	13	1.63E-03	84.2	
40	0	911.46*	257	42	1.40	1823.64	1817	14	1.78E-02	8.6	
41	0	934.88	29	35	2.82	1870.52	1865	11	1.99E-03	44.4	
42	1	965.11	34	51	1.75	1931.00	1924	23	2.33E-03	41.7	1.14E+00
43	1	969.21	131	36	1.75	1939.20	1924	23	9.08E-03	13.3	
44	0	1063.94	19	9	1.59	2128.77	2126	6	1.30E-03	34.4	
45	0	1120.92*	100	76	1.61	2242.79	2234	17	6.91E-03	23.0	
46	0	1183.02	13	17	0.99	2367.04	2363	7	9.28E-04	58.3	
47	0	1231.97	36	13	3.53	2464.99	2460	11	2.48E-03	26.1	
48	0	1238.54	70	17	2.30	2478.14	2471	17	4.86E-03	18.0	
49	0	1246.59	15	26	0.96	2494.24	2488	12	1.07E-03	69.1	
50	0	1341.89*	23	7	3.02	2684.93	2679	13	1.61E-03	35.4	
51	0	1377.76	42	8	2.57	2756.69	2752	10	2.94E-03	19.6	
52	0	1461.02*	320	17	1.95	2923.28	2916	14	2.22E-02	6.6	
53	0	1497.78	15	31	0.72	2996.83	2987	18	1.06E-03	90.2	
54	0	1571.55	14	5	1.09	3144.41	3140	10	9.39E-04	41.5	
55	0	1588.26	41	8	2.05	3177.86	3172	12	2.85E-03	21.3	
56	0	1593.15	14	6	1.92	3187.64	3183	8	9.76E-04	40.3	
57	0	1613.30	6	9	1.05	3227.95	3222	8	4.17E-04	98.6	
58	0	1632.27	6	16	0.87	3265.89	3257	10	3.98E-04	141.6	
59	0	1638.50	12	12	2.31	3278.37	3272	12	8.04E-04	66.9	
60	0	1658.18	7	6	1.31	3317.73	3313	8	4.97E-04	69.9	
61	0	1678.28	19	7	2.29	3357.95	3352	13	1.28E-03	36.7	
62	0	1729.48	29	15	0.60	3460.38	3454	15	2.01E-03	34.5	
63	0	1764.86	96	0	1.68	3531.15	3525	13	6.67E-03	10.2	
64	0	1821.94	9	15	0.81	3645.35	3635	12	6.13E-04	94.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701008       *
* Acquisition date : 13-DEC-2007 07:36:26 Detector SN#    :                 *
* Detector ID      : GAM11                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.94     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701008           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1501E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-OCT-2007 15:05:44 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.871E+00	5.654E-01	2.811E-01	0.000E+00
CS-137	2.497E-01	4.604E-02	3.289E-02	0.000E+00
TL-208	2.314E-01	4.749E-02	2.978E-02	0.000E+00
BI-212	5.766E-01	2.779E-01	2.328E-01	0.000E+00
PB-212	8.583E-01	7.592E-02	4.328E-02	0.000E+00
BI-214	6.019E-01	9.555E-02	5.283E-02	0.000E+00
PB-214	6.425E-01	8.732E-02	5.655E-02	0.000E+00
RA-223	2.771E-01	1.447E-01	1.359E-01	0.000E+00
AC-228	8.521E-01	1.617E-01	9.567E-02	0.000E+00
TH-234	1.080E+00	3.341E-01	3.232E-01	0.000E+00
NP-236	1.086E-02	3.058E-02	4.196E-02	0.000E+00
NP-237	4.980E-01	1.505E-01	1.464E-01	0.000E+00
AM-243	1.316E-01	2.827E-02	3.553E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	6.169E-03	2.050E-02	3.525E-02	0.000E+00	NOT IDENT.
RH-101	7.219E-03	1.682E-02	2.754E-02	0.000E+00	NOT IDENT.
SB-125	1.664E-03	4.656E-02	8.025E-02	0.000E+00	NOT IDENT.
EU-155	2.026E-03	4.577E-02	8.065E-02	0.000E+00	NOT IDENT.
PO-209	-1.350E+00	3.825E+00	5.480E+00	0.000E+00	NOT IDENT.
BI-211	-4.120E-02	4.619E-01	7.878E-01	0.000E+00	NOT IDENT.
PA-233	7.403E-03	3.081E-02	5.125E-02	0.000E+00	NOT IDENT.
PA-234M	-1.186E-01	2.333E+00	3.816E+00	0.000E+00	NOT IDENT.
U-235	-5.863E-02	9.482E-02	1.480E-01	0.000E+00	NOT IDENT.
NP-239	7.422E-03	1.032E-01	1.737E-01	0.000E+00	NOT IDENT.
AM-241	4.048E-02	5.471E-02	8.601E-02	0.000E+00	NOT IDENT.
CM-243	-3.719E-04	4.174E-02	7.019E-02	0.000E+00	NOT IDENT.
AM-246	8.053E-03	6.326E-02	1.078E-01	0.000E+00	NOT IDENT.
CF-249	-3.520E-03	1.855E-02	3.177E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:54:10.41

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701008.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:36:26
Sample ID        : G198701008           Sample quantity  : 1.15010E+02 GRAM
Detector name    : GAM11                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.94  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	320	10.66*	1.266E+00	3.871E+00	3.871E+00	14.90
CS-137	661.66	328	85.10*	2.532E+00	2.485E-01	2.497E-01	18.81
TL-208	277.36	------	6.31	5.036E+00	------	Line Not Found	------
	510.77	138	22.60	3.148E+00	3.161E-01	3.161E-01	57.62
	583.19	338	84.50*	2.820E+00	2.314E-01	2.314E-01	20.94
	763.13	------	1.81	2.235E+00	------	Line Not Found	------
	860.56	23	12.42	2.005E+00	1.536E-01	1.536E-01	168.58
BI-212	727.33	97	11.80*	2.331E+00	5.766E-01	5.766E-01	49.17
	785.37	------	1.10	2.178E+00	------	Line Not Found	------
	1620.50	------	1.49	1.176E+00	------	Line Not Found	------
PB-212	74.81	335	10.40	6.094E+00	8.627E-01	8.627E-01	21.93
	77.11	565	17.50	6.322E+00	8.335E-01	8.335E-01	15.95
	87.30	268	7.81	7.093E+00	7.907E-01	7.907E-01	30.84
	238.63	1275	43.30*	5.600E+00	8.583E-01	8.583E-01	9.03
	300.09	102	3.28	4.757E+00	1.063E+00	1.063E+00	46.60
BI-214	609.31	462	46.10*	2.718E+00	6.019E-01	6.019E-01	16.20
	768.36	------	4.94	2.221E+00	------	Line Not Found	------
	806.17	16	1.22	2.127E+00	9.992E-01	9.993E-01	141.31
	934.06	29	3.03	1.862E+00	8.294E-01	8.294E-01	89.28
	1120.29	100	15.10	1.581E+00	6.804E-01	6.805E-01	46.46
	1155.19	------	1.63	1.540E+00	------	Line Not Found	------
	1238.11	70	5.79	1.449E+00	1.361E+00	1.361E+00	36.56
	1280.96	------	1.43	1.408E+00	------	Line Not Found	------
	1377.67	42	4.00	1.326E+00	1.301E+00	1.301E+00	39.86
	1401.50	------	1.27	1.308E+00	------	Line Not Found	------
	1407.98	------	2.15	1.303E+00	------	Line Not Found	------
	1509.23	------	2.11	1.236E+00	------	Line Not Found	------
	1729.60	29	2.92	1.128E+00	1.437E+00	1.437E+00	69.33
	1764.49	96	15.40	1.115E+00	9.123E-01	9.124E-01	21.31
PB-214	74.81	335	6.44	6.094E+00	1.393E+00	1.393E+00	21.93
	77.11	565	10.80	6.322E+00	1.351E+00	1.351E+00	15.95
	87.30	268	4.84	7.093E+00	1.276E+00	1.276E+00	30.84

Sample ID : G198701008 Acquisition date : 13-DEC-2007 07:36:26

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	291	7.43	5.552E+00	1.152E+00	1.152E+00	27.56
	295.22	415	19.30	4.813E+00	7.295E-01	7.296E-01	17.71
	351.93	625	37.60*	4.222E+00	6.425E-01	6.425E-01	13.87
RA-223	269.46	119	13.70*	5.133E+00	2.771E-01	2.771E-01	53.29
AC-228	129.07	74	2.42	7.652E+00	6.493E-01	6.493E-01	81.06
	209.25	149	3.89	6.103E+00	1.023E+00	1.023E+00	50.70
	270.25	119	3.46	5.133E+00	1.097E+00	1.097E+00	53.29
	338.32	239	11.27	4.349E+00	7.953E-01	7.953E-01	25.30
	409.46	32	1.92	3.767E+00	7.267E-01	7.267E-01	99.80
	463.00	78	4.40	3.411E+00	8.498E-01	8.498E-01	56.43
	794.95	75	4.25	2.153E+00	1.345E+00	1.345E+00	56.89
	911.20	257	25.80*	1.905E+00	8.521E-01	8.521E-01	19.36
	964.77	34	4.99	1.809E+00	6.073E-01	6.073E-01	83.76
	968.97	131	15.80	1.802E+00	7.492E-01	7.492E-01	27.87
	1588.20	41	3.22	1.192E+00	1.744E+00	1.744E+00	43.05
TH-234	63.29	73	4.80	4.564E+00	5.405E-01	5.405E-01	110.47
	92.58	264	5.41*	7.368E+00	1.080E+00	1.080E+00	31.57
NP-236	98.44	19	38.00*	7.580E+00	1.086E-02	1.086E-02	287.27
NP-237	86.48	268	12.40*	7.093E+00	4.980E-01	4.980E-01	30.84
AM-243	74.66	335	68.20*	6.094E+00	1.316E-01	1.316E-01	21.93

Flag: "*" = Keyline

Sample ID : G198701008 Acquisition date : 13-DEC-2007 07:36:26

Total number of lines in spectrum	64	
Number of unidentified lines	28	
Number of lines tentatively identified by NID	36	56.25%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.871E+00	3.871E+00	0.577E+00	14.90	
CS-137	9.47E+08S	1.00	2.485E-01	2.497E-01	0.470E-01	18.81	
TL-208	4.43E+17S	1.00	2.314E-01	2.314E-01	0.485E-01	20.94	
BI-212	4.43E+17S	1.00	5.766E-01	5.766E-01	2.836E-01	49.17	
PB-212	4.43E+17S	1.00	8.583E-01	8.583E-01	0.775E-01	9.03	
BI-214	5.05E+10S	1.00	6.019E-01	6.019E-01	0.975E-01	16.20	
PB-214	5.05E+10S	1.00	6.425E-01	6.425E-01	0.891E-01	13.87	
RA-223	1.04E+12S	1.00	2.771E-01	2.771E-01	1.477E-01	53.29	
AC-228	4.43E+17S	1.00	8.521E-01	8.521E-01	1.650E-01	19.36	
TH-234	1.41E+17S	1.00	1.080E+00	1.080E+00	0.341E+00	31.57	
NP-236	4.89E+12S	1.00	1.086E-02	1.086E-02	3.120E-02	287.27	
NP-237	6.75E+13S	1.00	4.980E-01	4.980E-01	1.536E-01	30.84	
AM-243	2.33E+11S	1.00	1.316E-01	1.316E-01	0.288E-01	21.93	
			---	---			
		Total Activity :	9.880E+00	9.882E+00			
		Grand Total Activity :	9.880E+00	9.882E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701008 Acquisition date : 13-DEC-2007 07:36:26

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.10	18	266	0.77	91.67	89	6	1.22E-03	****	1.68E+00	
4	84.15	69	443	1.26	167.83	163	28	4.82E-03	****	6.91E+00	
4	89.80	164	346	1.14	179.13	163	28	1.14E-02	41.2	7.24E+00	
0	115.75	73	355	2.46	231.09	226	9	5.06E-03	96.2	7.75E+00	
0	174.48	25	233	0.86	348.64	347	7	1.75E-03	****	6.80E+00	
0	185.77	230	357	1.12	371.25	367	9	1.60E-02	35.5	6.57E+00	
0	303.42	20	148	1.36	606.73	605	7	1.37E-03	****	4.72E+00	
0	321.14	24	147	1.64	642.21	639	8	1.68E-03	****	4.52E+00	
0	328.62	54	126	2.24	657.17	654	7	3.76E-03	74.2	4.45E+00	
4	411.99	38	88	1.80	824.05	807	22	2.65E-03	98.3	3.74E+00	
0	422.47	7	117	1.08	845.02	839	8	4.98E-04	****	3.67E+00	
0	559.84	31	98	2.60	1119.96	1112	12	2.18E-03	****	2.92E+00	
0	652.06	17	38	1.54	1304.52	1302	6	1.16E-03	****	2.56E+00	
0	703.85	29	66	1.18	1408.16	1402	10	2.01E-03	****	2.40E+00	
0	1063.94	19	9	1.59	2128.77	2126	6	1.30E-03	68.8	1.66E+00	
0	1183.02	13	17	0.99	2367.04	2363	7	9.28E-04	****	1.51E+00	
0	1231.97	36	13	3.53	2464.99	2460	11	2.48E-03	52.3	1.46E+00	
0	1246.59	15	26	0.96	2494.24	2488	12	1.07E-03	****	1.44E+00	
0	1341.89	23	7	3.02	2684.93	2679	13	1.61E-03	70.8	1.35E+00	
0	1497.78	15	31	0.72	2996.83	2987	18	1.06E-03	****	1.24E+00	
0	1571.55	14	5	1.09	3144.41	3140	10	9.39E-04	83.0	1.20E+00	
0	1593.15	14	6	1.92	3187.64	3183	8	9.76E-04	80.5	1.19E+00	
0	1613.30	6	9	1.05	3227.95	3222	8	4.17E-04	****	1.18E+00	
0	1632.27	6	16	0.87	3265.89	3257	10	3.98E-04	****	1.17E+00	
0	1638.50	12	12	2.31	3278.37	3272	12	8.04E-04	****	1.17E+00	
0	1658.18	7	6	1.31	3317.73	3313	8	4.97E-04	****	1.16E+00	
0	1678.28	19	7	2.29	3357.95	3352	13	1.28E-03	73.4	1.15E+00	
0	1821.94	9	15	0.81	3645.35	3635	12	6.13E-04	****	1.10E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701008            *
* Acquisition date : 13-DEC-2007 07:36:26 Detector SN#    :                 *
* Detector ID      : GAM11                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.94     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701008           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1501E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-OCT-2007 15:05:44 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.871E+00	5.654E-01	1.406E-01	5.654E-01
CS-137	2.497E-01	4.604E-02	1.645E-02	4.604E-02
TL-208	2.314E-01	4.749E-02	1.490E-02	4.749E-02
BI-212	5.766E-01	2.779E-01	1.165E-01	2.779E-01
PB-212	8.583E-01	7.592E-02	2.165E-02	7.592E-02
BI-214	6.019E-01	9.555E-02	2.643E-02	9.555E-02
PB-214	6.425E-01	8.732E-02	2.829E-02	8.732E-02
RA-223	2.771E-01	1.447E-01	6.801E-02	1.447E-01
AC-228	8.521E-01	1.617E-01	4.786E-02	1.617E-01
TH-234	1.080E+00	3.341E-01	1.617E-01	3.341E-01
NP-236	1.086E-02	3.058E-02	2.099E-02	3.058E-02
NP-237	4.980E-01	1.505E-01	7.323E-02	1.505E-01
AM-243	1.316E-01	2.827E-02	1.777E-02	2.827E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	6.169E-03	2.050E-02	1.763E-02	2.050E-02	NOT IDENT.
RH-101	7.219E-03	1.682E-02	1.378E-02	1.682E-02	NOT IDENT.
SB-125	1.664E-03	4.656E-02	4.015E-02	4.656E-02	NOT IDENT.
EU-155	2.026E-03	4.577E-02	4.035E-02	4.577E-02	NOT IDENT.
PO-209	-1.350E+00	3.825E+00	2.741E+00	3.825E+00	NOT IDENT.
BI-211	-4.120E-02	4.619E-01	3.941E-01	4.619E-01	NOT IDENT.
PA-233	7.403E-03	3.081E-02	2.564E-02	3.081E-02	NOT IDENT.
PA-234M	-1.186E-01	2.333E+00	1.909E+00	2.333E+00	NOT IDENT.
U-235	-5.863E-02	9.482E-02	7.404E-02	9.482E-02	NOT IDENT.
NP-239	7.422E-03	1.032E-01	8.690E-02	1.032E-01	NOT IDENT.
AM-241	4.048E-02	5.471E-02	4.303E-02	5.471E-02	NOT IDENT.
CM-243	-3.719E-04	4.174E-02	3.512E-02	4.174E-02	NOT IDENT.
AM-246	8.053E-03	6.326E-02	5.391E-02	6.326E-02	NOT IDENT.
CF-249	-3.520E-03	1.855E-02	1.589E-02	1.855E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	214.6145
63.29	310.2964
74.66	359.4028
74.81	359.5242
74.81	359.5242
77.11	361.3941
77.11	361.3941
86.48	272.1368
87.30	272.5958
87.30	272.5958
92.58	275.5062
98.44	241.9492
103.76	253.4796
105.31	270.1710
129.07	267.6233
143.76	234.9367
198.00	210.9895
209.25	198.1306
228.18	193.7264
238.63	186.1777
242.00	186.8061
269.46	155.4035
270.25	155.5182
277.36	175.3970
295.22	131.9344
300.09	125.6902
312.17	133.8268
338.32	150.6627
351.93	137.1883
387.59	120.7910
409.46	103.2500
427.87	114.7701
463.00	103.9688
510.77	97.1042
583.19	86.6550
609.31	75.3949
661.66	85.7560
727.33	70.8359
763.13	71.8991
768.36	90.8962
785.37	52.4562
794.95	52.6570
806.17	54.9149
831.80	51.8232
860.56	50.5474
896.60	43.7642
911.20	38.3764
934.06	37.7402
964.77	43.8583
968.97	43.9212
1001.03	42.4596
1078.86	39.5625
1120.29	43.0651
1155.19	35.4153
1173.23	41.7027
1238.11	10.3574
1280.96	35.6253
1332.51	22.3022
1377.67	23.6339
1401.50	33.5006
1407.98	30.3064
1460.80	25.2146
1509.23	22.1768
1588.20	19.3510
1620.50	19.8951
1729.60	17.4521
1764.49	10.7413

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701008

Total Uranium Activity	-2.7129E-02	ug/g
Total Uranium Counting Unc.	4.3873E-02	ug/g
Total Uranium Tpu	4.3873E-08	ug/g
Total Uranium Mda	3.4260E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:54:44.34

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701009.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:37:04
Sample ID        : G198701009           Sample quantity  : 1.15730E+02 GRAM
Detector name    : GAM12                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.87  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.31*	64	389	0.92	125.85	122	8	4.43E-03	60.7	
2	4	74.88*	358	436	1.23	149.00	143	16	2.49E-02	11.4	7.79E-01
3	4	77.16	533	367	1.00	153.55	143	16	3.70E-02	7.2	
4	0	86.23*	285	701	1.13	171.71	165	12	1.98E-02	20.1	
5	2	89.86	155	220	1.37	178.97	177	14	1.08E-02	15.3	1.51E+00
6	2	92.82*	205	413	1.39	184.89	177	14	1.42E-02	22.7	
7	0	99.79	50	213	1.35	198.84	197	5	3.45E-03	46.8	
8	0	105.42	68	232	1.32	210.10	208	6	4.73E-03	37.3	
9	0	128.79	48	434	1.16	256.86	252	9	3.31E-03	80.1	
10	0	143.89*	40	308	0.69	287.07	284	7	2.78E-03	80.0	
11	0	185.94*	273	376	1.50	371.20	367	10	1.89E-02	16.3	
12	0	199.28*	14	272	1.23	397.89	395	7	9.45E-04	211.4	
13	0	209.44	160	289	2.03	418.21	414	9	1.11E-02	20.8	
14	4	238.56*	1176	221	1.20	476.48	469	21	8.17E-02	3.8	2.72E+00
15	4	241.68	333	298	1.94	482.73	469	21	2.31E-02	14.6	
16	0	264.30	45	157	1.52	527.99	525	7	3.11E-03	49.1	
17	0	269.90*	99	210	1.82	539.18	535	9	6.87E-03	30.6	
18	0	295.12*	322	273	1.29	589.64	585	10	2.24E-02	11.6	
19	0	300.10	101	176	1.31	599.60	596	8	7.04E-03	25.0	
20	0	314.11	35	207	1.27	627.63	623	10	2.40E-03	80.2	
21	0	328.50	67	227	2.98	656.42	651	11	4.68E-03	45.4	
22	0	338.40	215	321	1.52	676.23	669	14	1.50E-02	18.9	
23	0	351.81*	626	219	1.33	703.05	698	11	4.35E-02	6.3	
24	0	409.20	77	142	3.39	817.86	814	11	5.33E-03	32.0	
25	0	463.06	59	133	2.50	925.60	921	9	4.13E-03	37.3	
26	0	487.91	109	166	4.19	975.31	967	17	7.57E-03	29.2	
27	0	510.73*	143	239	2.14	1020.95	1012	19	9.90E-03	32.4	
28	0	582.86*	337	131	1.24	1165.23	1160	12	2.34E-02	9.2	
29	0	609.00*	476	117	1.41	1217.51	1211	12	3.30E-02	7.0	
30	0	661.33*	198	179	1.57	1322.18	1314	17	1.37E-02	17.5	
31	0	727.47	108	89	1.82	1454.47	1448	16	7.53E-03	21.9	
32	0	771.92	10	63	1.30	1543.37	1540	8	6.93E-04	139.1	
33	0	794.89	36	49	1.37	1589.30	1584	9	2.52E-03	38.6	
34	0	860.67	44	88	2.13	1720.86	1713	13	3.07E-03	46.3	
35	0	910.71*	230	46	1.70	1820.94	1812	15	1.60E-02	10.0	
36	1	964.64	64	29	1.96	1928.77	1922	22	4.46E-03	22.8	1.51E+00
37	1	968.57	207	26	1.96	1936.64	1922	22	1.44E-02	8.7	
38	0	1013.38	24	19	1.60	2026.24	2022	9	1.65E-03	39.7	

Sample ID : G198701009 Acquisition date : 13-DEC-2007 07:37:04

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1025.22*	4	44	2.19	2049.93	2042	9	2.65E-04	327.8	
40	0	1040.86	25	33	0.67	2081.20	2072	13	1.70E-03	52.1	
41	0	1049.15	16	49	4.83	2097.76	2089	14	1.11E-03	101.3	
42	5	1093.22	18	13	1.56	2185.90	2183	12	1.28E-03	36.6	2.62E+00
43	5	1096.20	10	20	1.51	2191.86	2183	12	6.60E-04	81.2	
44	0	1119.66*	123	33	1.57	2238.75	2233	13	8.58E-03	14.2	
45	0	1208.89	54	110	10.72	2417.17	2393	40	3.76E-03	65.7	
46	0	1238.47	38	65	2.00	2476.32	2469	16	2.63E-03	50.0	
47	0	1254.71	8	38	0.78	2508.78	2499	12	5.33E-04	179.6	
48	5	1256.36*	13	3	1.18	2512.08	2510	11	9.01E-04	44.8	6.06E-01
49	5	1258.98*	13	4	1.95	2517.32	2510	11	9.15E-04	50.7	
50	0	1285.80	31	62	8.13	2570.95	2555	28	2.16E-03	80.7	
51	0	1378.25	57	46	9.26	2755.77	2745	29	3.93E-03	36.1	
52	0	1407.84	25	17	0.65	2814.94	2810	11	1.70E-03	37.9	
53	0	1460.03*	300	41	1.73	2919.27	2912	17	2.08E-02	8.0	
54	0	1486.68	7	17	0.93	2972.54	2966	12	4.57E-04	134.2	
55	0	1511.29	38	22	6.80	3021.74	3013	19	2.65E-03	36.6	
56	0	1572.57	10	20	4.32	3144.23	3135	14	6.90E-04	102.4	
57	0	1588.59	13	29	1.13	3176.25	3165	13	8.97E-04	90.6	
58	0	1620.76	13	8	0.71	3240.56	3236	8	8.80E-04	50.6	
59	0	1630.54	21	26	4.58	3260.12	3251	17	1.42E-03	60.6	
60	0	1655.41	9	8	0.78	3309.81	3302	10	6.47E-04	64.1	
61	0	1700.71	20	15	3.94	3400.38	3388	20	1.39E-03	52.4	
62	0	1729.22	17	10	0.64	3457.35	3453	9	1.19E-03	42.3	
63	0	1763.62*	91	21	1.27	3526.11	3519	14	6.33E-03	16.5	
64	0	1801.37	15	14	2.37	3601.56	3596	13	1.05E-03	55.7	
65	0	1847.28	13	20	3.26	3693.31	3684	16	8.69E-04	84.9	
66	0	1979.34	7	5	0.73	3957.24	3952	9	5.03E-04	64.9	
67	0	2009.96	4	6	0.84	4018.43	4012	8	2.64E-04	123.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701009       *
* Acquisition date : 13-DEC-2007 07:37:04 Detector SN#    :                 *
* Detector ID      : GAM12                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.87     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701009           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1573E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  1-FEB-2007 15:01:06 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.021E+00	6.750E-01	3.569E-01	0.000E+00
RH-101	5.686E-03	2.357E-02	3.534E-02	0.000E+00
CS-137	1.683E-01	5.957E-02	3.831E-02	0.000E+00
EU-155	8.311E-02	6.103E-02	1.105E-01	0.000E+00
TL-208	2.588E-01	5.063E-02	3.353E-02	0.000E+00
BI-212	7.194E-01	3.161E-01	2.587E-01	0.000E+00
PB-212	8.897E-01	8.505E-02	5.818E-02	0.000E+00
BI-214	6.945E-01	1.103E-01	6.508E-02	0.000E+00
PB-214	7.231E-01	9.886E-02	7.350E-02	0.000E+00
RA-223	2.577E-01	1.555E-01	1.769E-01	0.000E+00
AC-228	8.522E-01	1.886E-01	1.292E-01	0.000E+00
PA-233	3.567E-02	5.614E-02	6.519E-02	0.000E+00
TH-234	1.019E+00	4.606E-01	4.221E-01	0.000E+00
U-235	9.188E-02	1.442E-01	2.027E-01	0.000E+00
NP-236	3.362E-02	3.095E-02	5.784E-02	0.000E+00
NP-237	6.613E-01	2.650E-01	2.260E-01	0.000E+00
AM-243	1.825E-01	4.288E-02	5.192E-02	0.000E+00
CM-243	7.478E-02	5.491E-02	9.008E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	-3.448E-03	2.191E-02	3.665E-02	0.000E+00	NOT IDENT.
SB-125	-4.824E-02	5.885E-02	9.158E-02	0.000E+00	NOT IDENT.
PO-209	6.015E-01	4.410E+00	7.404E+00	0.000E+00	NOT IDENT.
BI-211	2.529E-01	6.039E-01	1.042E+00	0.000E+00	NOT IDENT.
PA-234M	1.659E+00	2.949E+00	4.501E+00	0.000E+00	NOT IDENT.
NP-239	-3.105E-02	1.331E-01	2.253E-01	0.000E+00	NOT IDENT.
AM-241	-3.957E-02	1.004E-01	1.476E-01	0.000E+00	NOT IDENT.
AM-246	-1.519E-02	6.958E-02	1.164E-01	0.000E+00	NOT IDENT.
CF-249	2.132E-03	2.590E-02	4.315E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:54:45.30

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701009.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:37:04
Sample ID        : G198701009           Sample quantity  : 1.15730E+02 GRAM
Detector name    : GAM12                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.87  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	300	10.66*	1.134E+00	4.021E+00	4.021E+00	17.13
RH-101	198.00	14	73.00*	5.556E+00	5.441E-03	5.686E-03	422.89
CS-137	661.66	198	85.10*	2.248E+00	1.675E-01	1.683E-01	36.12
EU-155	105.31	68	21.20*	6.449E+00	8.072E-02	8.311E-02	74.93
TL-208	277.36	------	6.31	4.454E+00	------	Line Not Found	------
	510.77	143	22.60	2.787E+00	3.671E-01	3.671E-01	65.09
	583.19	337	84.50*	2.501E+00	2.588E-01	2.588E-01	19.96
	763.13	------	1.81	1.987E+00	------	Line Not Found	------
	860.56	44	12.42	1.787E+00	3.225E-01	3.225E-01	93.11
BI-212	727.33	108	11.80*	2.071E+00	7.194E-01	7.194E-01	44.84
	785.37	------	1.10	1.938E+00	------	Line Not Found	------
	1620.50	13	1.49	1.052E+00	1.311E+00	1.311E+00	101.28
PB-212	74.81	358	10.40	4.664E+00	1.197E+00	1.197E+00	23.97
	77.11	533	17.50	4.892E+00	1.010E+00	1.010E+00	16.16
	87.30	285	7.81	5.634E+00	1.050E+00	1.050E+00	40.89
	238.63	1176	43.30*	4.950E+00	8.897E-01	8.897E-01	9.75
	300.09	101	3.28	4.205E+00	1.192E+00	1.192E+00	50.32
BI-214	609.31	476	46.10*	2.411E+00	6.944E-01	6.945E-01	16.21
	768.36	------	4.94	1.975E+00	------	Line Not Found	------
	806.17	------	1.22	1.894E+00	------	Line Not Found	------
	934.06	------	3.03	1.662E+00	------	Line Not Found	------
	1120.29	123	15.10	1.415E+00	9.376E-01	9.376E-01	29.27
	1155.19	------	1.63	1.377E+00	------	Line Not Found	------
	1238.11	38	5.79	1.296E+00	8.196E-01	8.197E-01	100.09
	1280.96	------	1.43	1.260E+00	------	Line Not Found	------
	1377.67	57	4.00	1.186E+00	1.936E+00	1.936E+00	72.46
	1401.50	------	1.27	1.171E+00	------	Line Not Found	------
	1407.98	25	2.15	1.167E+00	1.584E+00	1.584E+00	76.11
	1509.23	------	2.11	1.106E+00	------	Line Not Found	------
	1729.60	17	2.92	1.009E+00	9.417E-01	9.418E-01	84.74
	1764.49	91	15.40	9.976E-01	9.618E-01	9.619E-01	33.53
PB-214	74.81	358	6.44	4.664E+00	1.933E+00	1.933E+00	23.97

Sample ID : G198701009 Acquisition date : 13-DEC-2007 07:37:04

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	77.11	533	10.80	4.892E+00	1.637E+00	1.637E+00	16.16
	87.30	285	4.84	5.634E+00	1.694E+00	1.694E+00	40.89
	242.00	333	7.43	4.906E+00	1.483E+00	1.483E+00	29.79
	295.22	322	19.30	4.257E+00	6.359E-01	6.359E-01	24.05
	351.93	626	37.60*	3.733E+00	7.230E-01	7.231E-01	13.95
RA-223	269.46	99	13.70*	4.542E+00	2.577E-01	2.577E-01	61.56
AC-228	129.07	48	2.42	6.596E+00	4.838E-01	4.838E-01	160.32
	209.25	160	3.89	5.390E+00	1.234E+00	1.234E+00	41.95
	270.25	99	3.46	4.542E+00	1.020E+00	1.020E+00	61.56
	338.32	215	11.27	3.845E+00	8.063E-01	8.063E-01	38.33
	409.46	77	1.92	3.323E+00	1.952E+00	1.952E+00	64.28
	463.00	59	4.40	3.015E+00	7.264E-01	7.264E-01	74.83
	794.95	36	4.25	1.917E+00	7.224E-01	7.224E-01	77.85
	911.20	230	25.80*	1.700E+00	8.522E-01	8.522E-01	22.58
	964.77	64	4.99	1.615E+00	1.293E+00	1.293E+00	46.57
	968.97	207	15.80	1.609E+00	1.321E+00	1.321E+00	19.89
	1588.20	13	3.22	1.066E+00	6.101E-01	6.101E-01	181.38
PA-233	312.17	35	38.60*	4.065E+00	3.567E-02	3.567E-02	160.61
TH-234	63.29	64	4.80	3.259E+00	6.612E-01	6.612E-01	121.65
	92.58	205	5.41*	6.015E+00	1.019E+00	1.019E+00	46.10
U-235	143.76	40	10.96*	6.455E+00	9.188E-02	9.188E-02	160.10
NP-236	98.44	50	38.00*	6.297E+00	3.362E-02	3.362E-02	93.92
NP-237	86.48	285	12.40*	5.634E+00	6.613E-01	6.613E-01	40.89
AM-243	74.66	358	68.20*	4.664E+00	1.825E-01	1.825E-01	23.97
CM-243	103.76	68	23.00*	6.449E+00	7.440E-02	7.478E-02	74.93

Flag: "*" = Keyline

Sample ID : G198701009 Acquisition date : 13-DEC-2007 07:37:04

Total number of lines in spectrum 67
Number of unidentified lines 27
Number of lines tentatively identified by NID 40 59.70%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.021E+00	4.021E+00	0.689E+00	17.13	
RH-101	1.04E+08S	1.04	5.441E-03	5.686E-03	24.05E-03	422.89	
CS-137	9.47E+08S	1.00	1.675E-01	1.683E-01	0.608E-01	36.12	
EU-155	1.57E+08S	1.03	8.072E-02	8.311E-02	6.227E-02	74.93	
TL-208	4.43E+17S	1.00	2.588E-01	2.588E-01	0.517E-01	19.96	
BI-212	4.43E+17S	1.00	7.194E-01	7.194E-01	3.225E-01	44.84	
PB-212	4.43E+17S	1.00	8.897E-01	8.897E-01	0.868E-01	9.75	
BI-214	5.05E+10S	1.00	6.944E-01	6.945E-01	1.126E-01	16.21	
PB-214	5.05E+10S	1.00	7.230E-01	7.231E-01	1.009E-01	13.95	
RA-223	1.04E+12S	1.00	2.577E-01	2.577E-01	1.586E-01	61.56	
AC-228	4.43E+17S	1.00	8.522E-01	8.522E-01	1.925E-01	22.58	
PA-233	6.75E+13S	1.00	3.567E-02	3.567E-02	5.728E-02	160.61	
TH-234	1.41E+17S	1.00	1.019E+00	1.019E+00	0.470E+00	46.10	
U-235	2.22E+16S	1.00	9.188E-02	9.188E-02	14.71E-02	160.10	
NP-236	4.89E+12S	1.00	3.362E-02	3.362E-02	3.158E-02	93.92	
NP-237	6.75E+13S	1.00	6.613E-01	6.613E-01	2.704E-01	40.89	
AM-243	2.33E+11S	1.00	1.825E-01	1.825E-01	0.438E-01	23.97	
CM-243	8.99E+08S	1.01	7.440E-02	7.478E-02	5.603E-02	74.93	
			---	---			
	Total Activity :		1.077E+01	1.077E+01			

Grand Total Activity : 1.077E+01 1.077E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701009 Acquisition date : 13-DEC-2007 07:37:04

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.86	155	220	1.37	178.97	177	14	1.08E-02	30.6	5.86E+00	
0	185.94	273	376	1.50	371.20	367	10	1.89E-02	32.6	5.78E+00	
0	264.30	45	157	1.52	527.99	525	7	3.11E-03	98.2	4.61E+00	
0	328.50	67	227	2.98	656.42	651	11	4.68E-03	90.7	3.93E+00	
0	487.91	109	166	4.19	975.31	967	17	7.57E-03	58.5	2.89E+00	
0	771.92	10	63	1.30	1543.37	1540	8	6.93E-04	****	1.97E+00	
0	1013.38	24	19	1.60	2026.24	2022	9	1.65E-03	79.4	1.55E+00	
0	1025.22	4	44	2.19	2049.93	2042	9	2.65E-04	****	1.53E+00	
0	1040.86	25	33	0.67	2081.20	2072	13	1.70E-03	****	1.51E+00	
0	1049.15	16	49	4.83	2097.76	2089	14	1.11E-03	****	1.50E+00	
5	1093.22	18	13	1.56	2185.90	2183	12	1.28E-03	73.1	1.44E+00	
5	1096.20	10	20	1.51	2191.86	2183	12	6.60E-04	****	1.44E+00	
0	1208.89	54	110	10.72	2417.17	2393	40	3.76E-03	****	1.32E+00	
0	1254.71	8	38	0.78	2508.78	2499	12	5.33E-04	****	1.28E+00	
5	1256.36	13	3	1.18	2512.08	2510	11	9.01E-04	89.6	1.28E+00	
5	1258.98	13	4	1.95	2517.32	2510	11	9.15E-04	****	1.28E+00	
0	1285.80	31	62	8.13	2570.95	2555	28	2.16E-03	****	1.26E+00	
0	1486.68	7	17	0.93	2972.54	2966	12	4.57E-04	****	1.12E+00	
0	1511.29	38	22	6.80	3021.74	3013	19	2.65E-03	73.3	1.11E+00	
0	1572.57	10	20	4.32	3144.23	3135	14	6.90E-04	****	1.07E+00	
0	1630.54	21	26	4.58	3260.12	3251	17	1.42E-03	****	1.05E+00	
0	1655.41	9	8	0.78	3309.81	3302	10	6.47E-04	****	1.04E+00	
0	1700.71	20	15	3.94	3400.38	3388	20	1.39E-03	****	1.02E+00	
0	1801.37	15	14	2.37	3601.56	3596	13	1.05E-03	****	9.86E-01	
0	1847.28	13	20	3.26	3693.31	3684	16	8.69E-04	****	9.73E-01	
0	1979.34	7	5	0.73	3957.24	3952	9	5.03E-04	****	9.43E-01	
0	2009.96	4	6	0.84	4018.43	4012	8	2.64E-04	****	9.37E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701009            *
* Acquisition date : 13-DEC-2007 07:37:04 Detector SN#    :                 *
* Detector ID      : GAM12                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.87     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701009           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1573E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  1-FEB-2007 15:01:06 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.021E+00	6.750E-01	1.786E-01	6.750E-01
RH-101	5.686E-03	2.357E-02	1.768E-02	2.357E-02
CS-137	1.683E-01	5.957E-02	1.917E-02	5.957E-02
EU-155	8.311E-02	6.103E-02	5.526E-02	6.103E-02
TL-208	2.588E-01	5.063E-02	1.677E-02	5.063E-02
BI-212	7.194E-01	3.161E-01	1.294E-01	3.161E-01
PB-212	8.897E-01	8.505E-02	2.911E-02	8.505E-02
BI-214	6.945E-01	1.103E-01	3.256E-02	1.103E-01
PB-214	7.231E-01	9.886E-02	3.677E-02	9.886E-02
RA-223	2.577E-01	1.555E-01	8.849E-02	1.555E-01
AC-228	8.522E-01	1.886E-01	6.465E-02	1.886E-01
PA-233	3.567E-02	5.614E-02	3.262E-02	5.614E-02
TH-234	1.019E+00	4.606E-01	2.112E-01	4.606E-01
U-235	9.188E-02	1.442E-01	1.014E-01	1.442E-01
NP-236	3.362E-02	3.095E-02	2.894E-02	3.095E-02
NP-237	6.613E-01	2.650E-01	1.131E-01	2.650E-01
AM-243	1.825E-01	4.288E-02	2.597E-02	4.288E-02
CM-243	7.478E-02	5.491E-02	4.507E-02	5.491E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-3.448E-03	2.191E-02	1.834E-02	2.191E-02	NOT IDENT.
SB-125	-4.824E-02	5.885E-02	4.582E-02	5.885E-02	NOT IDENT.
PO-209	6.015E-01	4.410E+00	3.704E+00	4.410E+00	NOT IDENT.
BI-211	2.529E-01	6.039E-01	5.215E-01	6.039E-01	NOT IDENT.
PA-234M	1.659E+00	2.949E+00	2.252E+00	2.949E+00	NOT IDENT.
NP-239	-3.105E-02	1.331E-01	1.127E-01	1.331E-01	NOT IDENT.
AM-241	-3.957E-02	1.004E-01	7.385E-02	1.004E-01	NOT IDENT.
AM-246	-1.519E-02	6.958E-02	5.823E-02	6.958E-02	NOT IDENT.
CF-249	2.132E-03	2.590E-02	2.159E-02	2.590E-02	NOT IDENT.

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	373.5781
63.29	365.0125
74.66	451.2658
74.81	451.3703
74.81	451.3703
77.11	452.9486
77.11	452.9486
86.48	420.4102
87.30	383.2500
87.30	383.2500
92.58	315.3704
98.44	317.2348
103.76	293.7417
105.31	361.7547
129.07	370.2351
143.76	348.3799
198.00	322.7981
209.25	319.9292
228.18	271.5106
238.63	265.6813
242.00	266.3295
269.46	207.9777
270.25	222.1434
277.36	204.6590
295.22	232.3574
300.09	193.3956
312.17	181.5105
338.32	173.3341
351.93	183.1935
387.59	165.0300
409.46	152.6103
427.87	146.2462
463.00	149.5945
510.77	100.3294
583.19	87.2181
609.31	90.9690
661.66	92.7247
727.33	69.8770
763.13	117.1498
768.36	87.6717
785.37	80.3462
794.95	74.4650
806.17	69.6054
831.80	60.8639
860.56	58.9549
896.60	59.9196
911.20	56.2956
934.06	44.6137
964.77	41.7736
968.97	41.8203
1001.03	36.7675
1078.86	43.1962
1120.29	50.9263
1155.19	46.8018
1173.23	44.1772
1238.11	46.7370
1280.96	40.4363
1332.51	37.9606
1377.67	24.5616
1401.50	33.8477
1407.98	31.6315
1460.80	32.9611
1509.23	36.2944
1588.20	38.5844
1620.50	18.5229
1729.60	15.7324
1764.49	12.6602

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701009

Total Uranium Activity	4.2511E-02	ug/g
Total Uranium Counting Unc.	6.6701E-02	ug/g
Total Uranium Tpu	6.6701E-08	ug/g
Total Uranium Mda	4.6933E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:55:19.23

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701010.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:37:38
Sample ID        : G198701010           Sample quantity  : 1.14500E+02 GRAM
Detector name    : GAM14                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.25  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.62*	14	469	2.26	93.21	90	8	9.71E-04	296.8	
2	0	63.58*	60	639	1.90	127.13	123	9	4.19E-03	80.6	
3	3	74.87*	665	728	1.54	149.70	142	17	4.62E-02	9.0	1.18E+00
4	3	77.11*	1059	632	1.30	154.17	142	17	7.36E-02	5.6	
5	3	84.37	105	770	1.50	168.69	162	30	7.26E-03	46.6	8.78E-01
6	3	87.19	393	634	1.34	174.33	162	30	2.73E-02	12.0	
7	3	89.92	267	651	1.51	179.78	162	30	1.85E-02	19.3	
8	3	92.86*	476	710	1.83	185.66	162	30	3.30E-02	13.3	
9	0	106.18	25	520	1.43	212.30	207	8	1.76E-03	157.0	
10	0	129.16	87	541	1.70	258.24	254	9	6.05E-03	49.3	
11	0	143.89*	51	482	1.53	287.69	284	9	3.57E-03	82.7	
12	0	163.39	30	384	1.29	326.69	324	7	2.06E-03	110.6	
13	0	185.95*	469	590	1.52	371.78	366	13	3.26E-02	12.3	
14	0	209.53	84	433	0.99	418.93	414	9	5.85E-03	46.0	
15	1	238.46*	1727	344	1.43	476.77	469	20	1.20E-01	3.2	1.21E+00
16	1	241.53	497	362	1.71	482.93	469	20	3.45E-02	9.7	
17	0	270.69	100	362	1.49	541.22	535	10	6.93E-03	37.2	
18	0	278.72	52	397	2.36	557.28	549	11	3.58E-03	76.6	
19	0	294.95*	822	376	1.48	589.73	582	14	5.71E-02	6.2	
20	0	299.72	151	241	1.81	599.28	596	9	1.05E-02	20.1	
21	0	308.70	38	185	2.21	617.23	615	9	2.67E-03	65.9	
22	0	327.70	110	265	1.10	655.23	651	9	7.65E-03	28.2	
23	0	338.42	372	309	1.53	676.67	671	15	2.58E-02	11.7	
24	0	351.66*	1280	382	1.37	703.13	696	15	8.89E-02	4.5	
25	0	463.16	132	182	1.46	926.11	920	14	9.17E-03	23.4	
26	0	510.50*	119	309	2.23	1020.80	1013	19	8.27E-03	41.4	
27	0	561.74	44	145	2.61	1123.26	1119	11	3.09E-03	54.2	
28	0	568.94*	184	206	2.51	1137.67	1130	16	1.28E-02	21.2	
29	0	582.98*	450	202	1.70	1165.75	1159	16	3.12E-02	8.8	
30	0	609.21*	1031	163	1.56	1218.22	1209	17	7.16E-02	4.3	
31	0	661.84	207	173	1.63	1323.48	1315	14	1.44E-02	15.1	
32	0	727.48	143	116	1.74	1454.79	1448	15	9.95E-03	18.4	
33	0	771.05	125	257	4.64	1541.94	1529	29	8.71E-03	38.5	
34	4	782.17	15	30	1.25	1564.19	1562	15	1.04E-03	55.6	1.14E+00
35	4	785.73	38	86	2.70	1571.29	1562	15	2.66E-03	52.1	
36	0	794.80	76	96	1.45	1589.44	1584	13	5.28E-03	28.8	
37	0	838.27	60	161	5.02	1676.40	1662	23	4.17E-03	56.4	
38	0	860.73	114	52	2.01	1721.34	1714	16	7.89E-03	17.0	

Sample ID : G198701010 Acquisition date : 13-DEC-2007 07:37:38

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	911.32*	364	68	1.88	1822.53	1816	13	2.53E-02	7.2	
40	0	935.10	57	98	0.99	1870.11	1861	19	3.94E-03	44.2	
41	3	964.41	70	70	2.29	1928.75	1924	23	4.86E-03	26.5	2.05E+00
42	3	969.12*	187	93	1.86	1938.18	1924	23	1.30E-02	12.6	
43	0	1029.65	28	28	1.35	2059.28	2055	11	1.93E-03	42.5	
44	0	1055.97	13	46	1.05	2111.94	2108	9	8.75E-04	100.5	
45	0	1121.15	232	95	2.30	2242.35	2231	23	1.61E-02	12.8	
46	0	1238.81	98	55	1.81	2477.80	2468	17	6.81E-03	20.1	
47	0	1263.36	27	47	4.90	2526.93	2516	17	1.91E-03	60.1	
48	1	1281.68	31	53	2.23	2563.59	2557	28	2.16E-03	50.5	6.13E+00
49	1	1287.38	29	29	2.03	2575.00	2557	28	2.01E-03	44.8	
50	0	1353.21	7	29	3.40	2706.75	2698	10	4.78E-04	152.9	
51	0	1378.32	47	44	1.36	2756.99	2750	12	3.26E-03	32.1	
52	0	1461.20*	687	62	2.02	2922.87	2915	16	4.77E-02	4.7	
53	0	1590.83	72	35	6.02	3182.33	3169	24	4.98E-03	25.0	
54	0	1621.58*	6	23	1.45	3243.88	3239	9	4.39E-04	187.1	
55	0	1729.22	53	12	1.48	3459.35	3451	16	3.69E-03	20.0	
56	0	1764.78*	164	0	1.85	3530.55	3523	14	1.14E-02	8.7	
57	0	1849.30	53	10	5.62	3699.75	3689	21	3.68E-03	20.5	
58	0	1967.77	12	2	2.26	3936.94	3933	9	8.46E-04	35.9	
59	0	1975.96	17	6	1.41	3953.36	3946	13	1.17E-03	39.5	
60	0	2035.33	8	21	0.68	4072.22	4061	14	5.82E-04	120.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701010       *
* Acquisition date : 13-DEC-2007 07:37:38 Detector SN#    :                 *
* Detector ID      : GAM14                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.25     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701010           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1450E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-MAR-2007 18:40:51 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	8.587E+00	9.175E-01	3.547E-01	0.000E+00
CS-137	1.602E-01	4.902E-02	4.197E-02	0.000E+00
EU-155	2.536E-02	7.805E-02	1.068E-01	0.000E+00
TL-208	3.120E-01	5.817E-02	3.596E-02	0.000E+00
BI-212	8.658E-01	3.198E-01	2.883E-01	0.000E+00
PB-212	1.158E+00	1.021E-01	6.141E-02	0.000E+00
BI-214	1.363E+00	1.518E-01	7.324E-02	0.000E+00
PB-214	1.320E+00	1.396E-01	7.109E-02	0.000E+00
RA-223	2.316E-01	1.693E-01	1.981E-01	0.000E+00
AC-228	1.239E+00	2.051E-01	1.419E-01	0.000E+00
TH-234	1.884E+00	5.131E-01	4.708E-01	0.000E+00
U-235	1.015E-01	1.647E-01	2.160E-01	0.000E+00
NP-237	7.035E-01	1.756E-01	2.132E-01	0.000E+00
AM-243	2.494E-01	4.775E-02	4.857E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	8.862E-03		2.904E-02	4.865E-02	0.000E+00	NOT IDENT.
RH-101	1.291E-02		2.210E-02	3.913E-02	0.000E+00	NOT IDENT.
SB-125	-4.192E-02		6.074E-02	9.884E-02	0.000E+00	NOT IDENT.
PO-209	-7.271E-01		4.611E+00	7.757E+00	0.000E+00	NOT IDENT.
BI-211	2.675E-01		6.804E-01	1.045E+00	0.000E+00	NOT IDENT.
PA-233	-3.096E-02		4.636E-02	6.601E-02	0.000E+00	NOT IDENT.
PA-234M	-1.021E-01		3.114E+00	4.806E+00	0.000E+00	NOT IDENT.
NP-236	3.295E-02		4.070E-02	6.201E-02	0.000E+00	NOT IDENT.
NP-239	1.402E-01		1.435E-01	2.560E-01	0.000E+00	NOT IDENT.
AM-241	5.026E-02		8.692E-02	1.272E-01	0.000E+00	NOT IDENT.
CM-243	-1.333E-02		6.952E-02	1.014E-01	0.000E+00	NOT IDENT.
AM-246	2.199E-02		8.546E-02	1.469E-01	0.000E+00	NOT IDENT.
CF-249	1.321E-02		2.727E-02	4.722E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:55:20.24

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701010.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:37:38
Sample ID        : G198701010           Sample quantity  : 1.14500E+02 GRAM
Detector name    : GAM14                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.25  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	687	10.66*	1.229E+00	8.587E+00	8.587E+00	10.90
CS-137	661.66	207	85.10*	2.502E+00	1.594E-01	1.602E-01	31.22
EU-155	105.31	25	21.20*	7.950E+00	2.464E-02	2.536E-02	314.01
TL-208	277.36	52	6.31	5.044E+00	2.656E-01	2.656E-01	153.31
	510.77	119	22.60	3.130E+00	2.760E-01	2.760E-01	83.13
	583.19	450	84.50*	2.796E+00	3.120E-01	3.120E-01	19.03
	763.13	------	1.81	2.201E+00	------	Line Not Found	------
	860.56	114	12.42	1.970E+00	7.614E-01	7.614E-01	35.14
BI-212	727.33	143	11.80*	2.299E+00	8.658E-01	8.658E-01	37.70
	785.37	38	1.10	2.143E+00	2.661E+00	2.661E+00	104.61
	1620.50	6	1.49	1.139E+00	6.110E-01	6.110E-01	374.23
PB-212	74.81	665	10.40	6.406E+00	1.636E+00	1.636E+00	19.53
	77.11	1059	17.50	6.631E+00	1.497E+00	1.497E+00	13.56
	87.30	393	7.81	7.387E+00	1.117E+00	1.117E+00	25.47
	238.63	1727	43.30*	5.646E+00	1.158E+00	1.158E+00	9.00
	300.09	151	3.28	4.778E+00	1.585E+00	1.585E+00	40.60
BI-214	609.31	1031	46.10*	2.691E+00	1.363E+00	1.363E+00	11.36
	768.36	------	4.94	2.187E+00	------	Line Not Found	------
	806.17	------	1.22	2.093E+00	------	Line Not Found	------
	934.06	57	3.03	1.824E+00	1.683E+00	1.683E+00	88.81
	1120.29	232	15.10	1.543E+00	1.635E+00	1.636E+00	26.60
	1155.19	------	1.63	1.502E+00	------	Line Not Found	------
	1238.11	98	5.79	1.411E+00	1.968E+00	1.968E+00	40.61
	1280.96	31	1.43	1.370E+00	2.605E+00	2.605E+00	101.13
	1377.67	47	4.00	1.288E+00	1.491E+00	1.491E+00	64.37
	1401.50	------	1.27	1.271E+00	------	Line Not Found	------
	1407.98	------	2.15	1.266E+00	------	Line Not Found	------
	1509.23	------	2.11	1.199E+00	------	Line Not Found	------
	1729.60	53	2.92	1.093E+00	2.731E+00	2.731E+00	40.36
	1764.49	164	15.40	1.081E+00	1.617E+00	1.618E+00	18.32
PB-214	74.81	665	6.44	6.406E+00	2.642E+00	2.642E+00	19.53
	77.11	1059	10.80	6.631E+00	2.425E+00	2.425E+00	13.56

Sample ID : G198701010 Acquisition date : 13-DEC-2007 07:37:38

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	393	4.84	7.387E+00	1.802E+00	1.803E+00	25.47
	242.00	497	7.43	5.596E+00	1.960E+00	1.960E+00	20.29
	295.22	822	19.30	4.836E+00	1.443E+00	1.443E+00	13.87
	351.93	1280	37.60*	4.228E+00	1.320E+00	1.320E+00	10.79
RA-223	269.46	100	13.70*	5.154E+00	2.316E-01	2.316E-01	74.57
AC-228	129.07	87	2.42	7.834E+00	7.532E-01	7.532E-01	98.79
	209.25	84	3.89	6.168E+00	5.753E-01	5.753E-01	92.16
	270.25	100	3.46	5.154E+00	9.172E-01	9.172E-01	74.57
	338.32	372	11.27	4.355E+00	1.241E+00	1.241E+00	24.09
	409.46	------	1.92	3.750E+00	------	Line Not Found	------
	463.00	132	4.40	3.393E+00	1.449E+00	1.449E+00	47.14
	794.95	76	4.25	2.121E+00	1.382E+00	1.382E+00	58.18
	911.20	364	25.80*	1.869E+00	1.239E+00	1.239E+00	16.89
	964.77	70	4.99	1.773E+00	1.295E+00	1.295E+00	53.58
	968.97	187	15.80	1.765E+00	1.099E+00	1.099E+00	26.51
	1588.20	------	3.22	1.156E+00	------	Line Not Found	------
TH-234	63.29	60	4.80	4.918E+00	4.191E-01	4.191E-01	161.45
	92.58	476	5.41*	7.653E+00	1.884E+00	1.884E+00	27.80
U-235	143.76	51	10.96*	7.570E+00	1.015E-01	1.015E-01	165.59
NP-237	86.48	393	12.40*	7.387E+00	7.035E-01	7.035E-01	25.47
AM-243	74.66	665	68.20*	6.406E+00	2.494E-01	2.494E-01	19.53

Flag: "*" = Keyline

Sample ID : G198701010 Acquisition date : 13-DEC-2007 07:37:38

Total number of lines in spectrum 60
Number of unidentified lines 22
Number of lines tentatively identified by NID 38 63.33%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	8.587E+00	8.587E+00	0.936E+00	10.90	
CS-137	9.47E+08S	1.00	1.594E-01	1.602E-01	0.500E-01	31.22	
EU-155	1.57E+08S	1.03	2.464E-02	2.536E-02	7.965E-02	314.01	
TL-208	4.43E+17S	1.00	3.120E-01	3.120E-01	0.594E-01	19.03	
BI-212	4.43E+17S	1.00	8.658E-01	8.658E-01	3.264E-01	37.70	
PB-212	4.43E+17S	1.00	1.158E+00	1.158E+00	0.104E+00	9.00	
BI-214	5.05E+10S	1.00	1.363E+00	1.363E+00	0.155E+00	11.36	
PB-214	5.05E+10S	1.00	1.320E+00	1.320E+00	0.142E+00	10.79	
RA-223	1.04E+12S	1.00	2.316E-01	2.316E-01	1.727E-01	74.57	
AC-228	4.43E+17S	1.00	1.239E+00	1.239E+00	0.209E+00	16.89	
TH-234	1.41E+17S	1.00	1.884E+00	1.884E+00	0.524E+00	27.80	
U-235	2.22E+16S	1.00	1.015E-01	1.015E-01	1.680E-01	165.59	
NP-237	6.75E+13S	1.00	7.035E-01	7.035E-01	1.792E-01	25.47	
AM-243	2.33E+11S	1.00	2.494E-01	2.494E-01	0.487E-01	19.53	
			---	---			
	Total Activity :		1.820E+01	1.820E+01			

Grand Total Activity : 1.820E+01 1.820E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701010 Acquisition date : 13-DEC-2007 07:37:38

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.62	14	469	2.26	93.21	90	8	9.71E-04	****	1.91E+00	
3	84.37	105	770	1.50	168.69	162	30	7.26E-03	93.2	7.22E+00	
3	89.92	267	651	1.51	179.78	162	30	1.85E-02	38.5	7.53E+00	
0	163.39	30	384	1.29	326.69	324	7	2.06E-03	****	7.15E+00	
0	185.95	469	590	1.52	371.78	366	13	3.26E-02	24.5	6.65E+00	
0	308.70	38	185	2.21	617.23	615	9	2.67E-03	****	4.67E+00	
0	327.70	110	265	1.10	655.23	651	9	7.65E-03	56.4	4.46E+00	
0	561.74	44	145	2.61	1123.26	1119	11	3.09E-03	****	2.89E+00	
0	568.94	184	206	2.51	1137.67	1130	16	1.28E-02	42.5	2.86E+00	
0	771.05	125	257	4.64	1541.94	1529	29	8.71E-03	76.9	2.18E+00	
4	782.17	15	30	1.25	1564.19	1562	15	1.04E-03	****	2.15E+00	
0	838.27	60	161	5.02	1676.40	1662	23	4.17E-03	****	2.02E+00	
0	1029.65	28	28	1.35	2059.28	2055	11	1.93E-03	84.9	1.67E+00	
0	1055.97	13	46	1.05	2111.94	2108	9	8.75E-04	****	1.63E+00	
0	1263.36	27	47	4.90	2526.93	2516	17	1.91E-03	****	1.39E+00	
1	1287.38	29	29	2.03	2575.00	2557	28	2.01E-03	89.6	1.36E+00	
0	1353.21	7	29	3.40	2706.75	2698	10	4.78E-04	****	1.31E+00	
0	1590.83	72	35	6.02	3182.33	3169	24	4.98E-03	50.1	1.15E+00	
0	1849.30	53	10	5.62	3699.75	3689	21	3.68E-03	41.0	1.05E+00	
0	1967.77	12	2	2.26	3936.94	3933	9	8.46E-04	71.7	1.03E+00	
0	1975.96	17	6	1.41	3953.36	3946	13	1.17E-03	79.0	1.02E+00	
0	2035.33	8	21	0.68	4072.22	4061	14	5.82E-04	****	1.01E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701010            *
* Acquisition date : 13-DEC-2007 07:37:38 Detector SN#    :                 *
* Detector ID      : GAM14                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.25     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701010           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1450E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-MAR-2007 18:40:51 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	8.587E+00	9.175E-01	1.775E-01	9.175E-01
CS-137	1.602E-01	4.902E-02	2.100E-02	4.902E-02
EU-155	2.536E-02	7.805E-02	5.344E-02	7.805E-02
TL-208	3.120E-01	5.817E-02	1.799E-02	5.817E-02
BI-212	8.658E-01	3.198E-01	1.442E-01	3.198E-01
PB-212	1.158E+00	1.021E-01	3.072E-02	1.021E-01
BI-214	1.363E+00	1.518E-01	3.664E-02	1.518E-01
PB-214	1.320E+00	1.396E-01	3.557E-02	1.396E-01
RA-223	2.316E-01	1.693E-01	9.912E-02	1.693E-01
AC-228	1.239E+00	2.051E-01	7.100E-02	2.051E-01
TH-234	1.884E+00	5.131E-01	2.355E-01	5.131E-01
U-235	1.015E-01	1.647E-01	1.081E-01	1.647E-01
NP-237	7.035E-01	1.756E-01	1.067E-01	1.756E-01
AM-243	2.494E-01	4.775E-02	2.430E-02	4.775E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	8.862E-03	2.904E-02	2.434E-02	2.904E-02	NOT IDENT.
RH-101	1.291E-02	2.210E-02	1.958E-02	2.210E-02	NOT IDENT.
SB-125	-4.192E-02	6.074E-02	4.945E-02	6.074E-02	NOT IDENT.
PO-209	-7.271E-01	4.611E+00	3.881E+00	4.611E+00	NOT IDENT.
BI-211	2.675E-01	6.804E-01	5.227E-01	6.804E-01	NOT IDENT.
PA-233	-3.096E-02	4.636E-02	3.302E-02	4.636E-02	NOT IDENT.
PA-234M	-1.021E-01	3.114E+00	2.404E+00	3.114E+00	NOT IDENT.
NP-236	3.295E-02	4.070E-02	3.102E-02	4.070E-02	NOT IDENT.
NP-239	1.402E-01	1.435E-01	1.281E-01	1.435E-01	NOT IDENT.
AM-241	5.026E-02	8.692E-02	6.362E-02	8.692E-02	NOT IDENT.
CM-243	-1.333E-02	6.952E-02	5.075E-02	6.952E-02	NOT IDENT.
AM-246	2.199E-02	8.546E-02	7.349E-02	8.546E-02	NOT IDENT.
CF-249	1.321E-02	2.727E-02	2.363E-02	2.727E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	553.6039
63.29	656.8359
74.66	734.5647
74.81	734.6725
74.81	734.6725
77.11	736.3214
77.11	736.3214
86.48	621.4048
87.30	621.8646
87.30	621.8646
92.58	624.7767
98.44	501.6008
103.76	573.8311
105.31	504.4439
129.07	521.2421
143.76	534.2693
198.00	476.2791
209.25	433.4768
228.18	377.7409
238.63	377.8661
242.00	358.0331
269.46	331.3102
270.25	343.9965
277.36	321.4685
295.22	327.1893
300.09	241.9253
312.17	268.7617
338.32	231.8609
351.93	215.5452
387.59	231.2978
409.46	209.2028
427.87	199.5126
463.00	157.2270
510.77	160.6332
583.19	123.0414
609.31	140.8741
661.66	135.3116
727.33	104.7891
763.13	102.2222
768.36	114.6260
785.37	101.7975
794.95	99.8020
806.17	92.6432
831.80	73.4729
860.56	66.5668
896.60	85.9697
911.20	80.5452
934.06	59.9777
964.77	81.4220
968.97	81.4912
1001.03	73.3204
1078.86	67.5485
1120.29	58.1958
1155.19	66.4957
1173.23	68.6940
1238.11	61.4021
1280.96	55.6094
1332.51	49.0625
1377.67	49.4102
1401.50	47.5255
1407.98	39.2988
1460.80	37.5264
1509.23	46.1914
1588.20	29.7261
1620.50	28.7930
1729.60	22.2614
1764.49	13.0449

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701010

Total Uranium Activity	4.6951E-02	ug/g
Total Uranium Counting Unc.	7.6190E-02	ug/g
Total Uranium Tpu	7.6190E-08	ug/g
Total Uranium Mda	5.0002E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:55:56.54

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701011.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:39:40
Sample ID        : G198701011           Sample quantity  : 1.13080E+02 GRAM
Detector name    : GAM02                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:03.58  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.31*	3	384	1.05	126.16	121	9	2.35E-04	*****	
2	3	74.85*	155	306	1.04	149.22	146	13	1.07E-02	22.2	1.52E+00
3	3	77.15*	280	301	0.94	153.80	146	13	1.95E-02	12.1	
4	0	87.04	75	252	0.95	173.59	172	5	5.22E-03	33.6	
5	0	92.87*	166	445	1.14	185.23	181	10	1.15E-02	29.6	
6	4	105.72	97	275	1.42	210.90	207	23	6.72E-03	34.1	1.54E+00
7	4	108.09	54	261	1.30	215.65	207	23	3.78E-03	55.2	
8	4	112.78*	38	331	1.44	225.01	207	23	2.65E-03	91.2	
9	0	143.84*	33	234	0.65	287.07	284	7	2.28E-03	89.8	
10	0	185.83*	96	406	1.01	370.98	365	12	6.68E-03	49.2	
11	0	209.07	33	221	1.02	417.41	415	7	2.29E-03	76.8	
12	0	238.61*	447	392	1.08	476.43	472	8	3.10E-02	9.0	
13	0	270.52	82	179	1.17	540.20	536	10	5.68E-03	32.4	
14	0	295.16*	222	174	1.47	589.45	586	10	1.54E-02	13.7	
15	0	300.40	69	166	0.93	599.91	596	10	4.82E-03	36.8	
16	0	328.38	75	131	0.87	655.83	651	10	5.24E-03	30.7	
17	0	338.56	113	181	1.19	676.17	670	11	7.83E-03	25.0	
18	0	351.74*	302	190	1.12	702.51	696	14	2.10E-02	11.8	
19	0	420.87	28	86	1.77	840.66	836	8	1.93E-03	60.9	
20	0	462.55	52	121	1.00	923.94	918	11	3.63E-03	43.0	
21	0	510.86*	137	121	2.10	1020.48	1012	18	9.51E-03	26.5	
22	0	583.44*	182	92	1.72	1165.53	1160	16	1.27E-02	16.4	
23	0	609.46*	221	127	1.25	1217.53	1211	14	1.54E-02	13.5	
24	0	624.11	17	80	0.44	1246.79	1241	11	1.18E-03	105.1	
25	0	661.55	306	86	1.51	1321.61	1315	11	2.13E-02	8.2	
26	0	727.61	61	67	2.43	1453.63	1448	13	4.27E-03	30.4	
27	0	742.13	15	49	0.55	1482.66	1478	10	1.08E-03	87.3	
28	0	786.25	16	33	0.68	1570.83	1567	7	1.11E-03	64.8	
29	0	800.21	7	30	0.48	1598.73	1594	8	4.94E-04	141.4	
30	0	837.27	40	56	4.65	1672.80	1664	15	2.80E-03	43.4	
31	0	911.01	147	48	1.52	1820.16	1813	15	1.02E-02	13.2	
32	0	963.51	39	27	3.55	1925.10	1919	11	2.67E-03	30.9	
33	0	969.10*	93	41	2.19	1936.26	1931	11	6.44E-03	17.9	
34	0	1000.10*	22	36	1.12	1998.23	1992	13	1.52E-03	71.5	
35	0	1119.53	75	29	1.41	2236.92	2230	13	5.23E-03	18.7	
36	0	1152.52	42	68	10.27	2302.87	2288	30	2.93E-03	58.8	
37	0	1172.08	8	15	0.52	2341.95	2337	7	5.22E-04	94.5	
38	0	1326.07	26	14	3.09	2649.74	2641	19	1.77E-03	40.6	

Sample ID : G198701011 Acquisition date : 13-DEC-2007 07:39:40

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1377.03	20	21	1.10	2751.60	2744	14	1.39E-03	53.5	
40	0	1460.43*	198	16	1.45	2918.29	2910	16	1.37E-02	9.0	
41	0	1648.19	9	6	0.52	3293.61	3284	13	5.97E-04	69.9	
42	0	1650.73	6	1	0.64	3298.68	3296	7	4.07E-04	54.2	
43	0	1763.91*	47	8	1.85	3524.93	3517	16	3.27E-03	23.8	
44	0	1806.26	15	6	3.85	3609.59	3603	12	1.07E-03	40.6	
45	0	1952.64	14	3	3.33	3902.21	3896	12	9.87E-04	35.9	
46	0	1965.73	6	12	3.45	3928.38	3918	12	4.09E-04	124.8	
47	0	2009.85	21	0	4.94	4016.57	4008	17	1.46E-03	21.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701011       *
* Acquisition date : 13-DEC-2007 07:39:40 Detector SN#    :                 *
* Detector ID      : GAM02                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:03.58     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701011           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1308E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-OCT-2007 15:13:16 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	2.894E+00	5.430E-01	3.018E-01	0.000E+00
CS-137	2.752E-01	4.710E-02	3.846E-02	0.000E+00
EU-155	1.225E-01	8.221E-02	8.974E-02	0.000E+00
TL-208	1.474E-01	4.803E-02	3.001E-02	0.000E+00
BI-212	4.309E-01	2.585E-01	2.550E-01	0.000E+00
PB-212	3.522E-01	6.548E-02	7.637E-02	0.000E+00
BI-214	3.404E-01	9.257E-02	6.453E-02	0.000E+00
PB-214	3.668E-01	8.737E-02	6.213E-02	0.000E+00
RA-223	2.235E-01	1.429E-01	1.491E-01	0.000E+00
AC-228	5.801E-01	1.564E-01	1.208E-01	0.000E+00
PA-234M	2.887E+00	4.051E+00	3.892E+00	0.000E+00
TH-234	8.772E-01	5.135E-01	4.457E-01	0.000E+00
U-235	7.706E-02	1.357E-01	1.608E-01	0.000E+00
NP-237	1.869E-01	1.241E-01	2.242E-01	0.000E+00
AM-243	9.072E-02	4.013E-02	4.743E-02	0.000E+00
CM-243	1.103E-01	7.397E-02	8.010E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	9.944E-03	1.843E-02	3.992E-02	0.000E+00	FAIL ABUN
RH-101	7.300E-03	1.975E-02	3.087E-02	0.000E+00	NOT IDENT.
SB-125	1.178E-02	5.589E-02	9.468E-02	0.000E+00	NOT IDENT.
PO-209	2.394E+00	3.811E+00	6.731E+00	0.000E+00	NOT IDENT.
BI-211	-3.161E-01	6.738E-01	9.043E-01	0.000E+00	NOT IDENT.
PA-233	2.253E-02	3.405E-02	6.049E-02	0.000E+00	NOT IDENT.
NP-236	-9.845E-03	3.636E-02	5.406E-02	0.000E+00	NOT IDENT.
NP-239	6.591E-03	1.232E-01	2.016E-01	0.000E+00	NOT IDENT.
AM-241	1.585E-03	1.018E-01	1.630E-01	0.000E+00	NOT IDENT.
AM-246	-9.994E-03	6.577E-02	1.098E-01	0.000E+00	NOT IDENT.
CF-249	-1.420E-02	2.283E-02	3.689E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:55:57.47

```
*************************************************************************
*                          GEL Laboratories LLC                         *
*                            2040 Savage Road                           *
*                          Charleston, SC 29414                         *
*************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701011.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 07:39:40
Sample ID        : G198701011           Sample quantity  : 1.13080E+02 GRAM
Detector name    : GAM02                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:03.58  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	198	10.66*	1.065E+00	2.894E+00	2.894E+00	19.15
CS-137	661.66	306	85.10*	2.182E+00	2.739E-01	2.752E-01	17.46
EU-155	105.31	97	21.20*	6.367E+00	1.190E-01	1.225E-01	68.46
TL-208	277.36	------	6.31	4.354E+00	------	Line Not Found	------
	510.77	137	22.60	2.710E+00	3.713E-01	3.713E-01	53.24
	583.19	182	84.50*	2.428E+00	1.474E-01	1.474E-01	33.24
	763.13	------	1.81	1.923E+00	------	Line Not Found	------
	860.56	------	12.42	1.723E+00	------	Line Not Found	------
BI-212	727.33	61	11.80*	2.007E+00	4.309E-01	4.309E-01	61.21
	785.37	16	1.10	1.871E+00	1.288E+00	1.288E+00	129.77
	1620.50	------	1.49	9.857E-01	------	Line Not Found	------
PB-212	74.81	155	10.40	4.152E+00	5.949E-01	5.949E-01	45.14
	77.11	280	17.50	4.421E+00	6.013E-01	6.013E-01	25.66
	87.30	75	7.81	5.383E+00	2.968E-01	2.968E-01	67.74
	238.63	447	43.30*	4.863E+00	3.522E-01	3.522E-01	18.97
	300.09	69	3.28	4.100E+00	8.567E-01	8.567E-01	73.97
BI-214	609.31	221	46.10*	2.341E+00	3.404E-01	3.404E-01	27.75
	768.36	------	4.94	1.911E+00	------	Line Not Found	------
	806.17	------	1.22	1.829E+00	------	Line Not Found	------
	934.06	------	3.03	1.596E+00	------	Line Not Found	------
	1120.29	75	15.10	1.347E+00	6.152E-01	6.152E-01	37.93
	1155.19	------	1.63	1.308E+00	------	Line Not Found	------
	1238.11	------	5.79	1.228E+00	------	Line Not Found	------
	1280.96	------	1.43	1.191E+00	------	Line Not Found	------
	1377.67	20	4.00	1.118E+00	7.422E-01	7.423E-01	107.21
	1401.50	------	1.27	1.102E+00	------	Line Not Found	------
	1407.98	------	2.15	1.098E+00	------	Line Not Found	------
	1509.23	------	2.11	1.038E+00	------	Line Not Found	------
	1729.60	------	2.92	9.455E-01	------	Line Not Found	------
	1764.49	47	15.40	9.349E-01	5.435E-01	5.435E-01	47.94
PB-214	74.81	155	6.44	4.152E+00	9.607E-01	9.608E-01	45.14
	77.11	280	10.80	4.421E+00	9.743E-01	9.744E-01	25.66

Sample ID : G198701011 Acquisition date : 13-DEC-2007 07:39:40

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	75	4.84	5.383E+00	4.789E-01	4.790E-01	67.74
	242.00	------	7.43	4.813E+00	------	Line Not Found	------
	295.22	222	19.30	4.155E+00	4.597E-01	4.597E-01	28.15
	351.93	302	37.60*	3.635E+00	3.667E-01	3.668E-01	24.31
RA-223	269.46	82	13.70*	4.436E+00	2.235E-01	2.235E-01	65.21
AC-228	129.07	------	2.42	6.596E+00	------	Line Not Found	------
	209.25	33	3.89	5.329E+00	2.637E-01	2.637E-01	153.69
	270.25	82	3.46	4.436E+00	8.851E-01	8.851E-01	65.21
	338.32	113	11.27	3.743E+00	4.435E-01	4.435E-01	50.34
	409.46	------	1.92	3.231E+00	------	Line Not Found	------
	463.00	52	4.40	2.935E+00	6.720E-01	6.720E-01	86.20
	794.95	------	4.25	1.853E+00	------	Line Not Found	------
	911.20	147	25.80*	1.634E+00	5.801E-01	5.801E-01	27.51
	964.77	39	4.99	1.550E+00	8.264E-01	8.264E-01	62.25
	968.97	93	15.80	1.542E+00	6.320E-01	6.320E-01	36.54
	1588.20	------	3.22	9.997E-01	------	Line Not Found	------
PA-234M	1001.03	22	0.84*	1.497E+00	2.887E+00	2.887E+00	143.17
TH-234	63.29	3	4.80	2.603E+00	4.503E-02	4.503E-02	2367.52
	92.58	166	5.41*	5.797E+00	8.772E-01	8.772E-01	59.73
U-235	143.76	33	10.96*	6.461E+00	7.706E-02	7.706E-02	179.69
NP-237	86.48	75	12.40*	5.383E+00	1.869E-01	1.869E-01	67.74
AM-243	74.66	155	68.20*	4.152E+00	9.072E-02	9.072E-02	45.14
CM-243	103.76	97	23.00*	6.367E+00	1.097E-01	1.103E-01	68.46

Flag: "*" = Keyline

Sample ID : G198701011 Acquisition date : 13-DEC-2007 07:39:40

Total number of lines in spectrum	47	
Number of unidentified lines	17	
Number of lines tentatively identified by NID	30	63.83%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	2.894E+00	2.894E+00	0.554E+00	19.15	
CS-137	9.47E+08S	1.00	2.739E-01	2.752E-01	0.481E-01	17.46	
EU-155	1.57E+08S	1.03	1.190E-01	1.225E-01	0.839E-01	68.46	
TL-208	4.43E+17S	1.00	1.474E-01	1.474E-01	0.490E-01	33.24	
BI-212	4.43E+17S	1.00	4.309E-01	4.309E-01	2.638E-01	61.21	
PB-212	4.43E+17S	1.00	3.522E-01	3.522E-01	0.668E-01	18.97	
BI-214	5.05E+10S	1.00	3.404E-01	3.404E-01	0.945E-01	27.75	
PB-214	5.05E+10S	1.00	3.667E-01	3.668E-01	0.892E-01	24.31	
RA-223	1.04E+12S	1.00	2.235E-01	2.235E-01	1.458E-01	65.21	
AC-228	4.43E+17S	1.00	5.801E-01	5.801E-01	1.596E-01	27.51	
PA-234M	1.41E+17S	1.00	2.887E+00	2.887E+00	4.134E+00	143.17	
TH-234	1.41E+17S	1.00	8.772E-01	8.772E-01	5.240E-01	59.73	
U-235	2.22E+16S	1.00	7.706E-02	7.706E-02	13.85E-02	179.69	
NP-237	6.75E+13S	1.00	1.869E-01	1.869E-01	1.266E-01	67.74	
AM-243	2.33E+11S	1.00	9.072E-02	9.072E-02	4.095E-02	45.14	
CM-243	8.99E+08S	1.01	1.097E-01	1.103E-01	0.755E-01	68.46	
		Total Activity :	9.957E+00	9.962E+00			
		Grand Total Activity :	9.957E+00	9.962E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701011 Acquisition date : 13-DEC-2007 07:39:40

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	108.09	54	261	1.30	215.65	207	23	3.78E-03	****	6.43E+00	
4	112.78	38	331	1.44	225.01	207	23	2.65E-03	****	6.52E+00	
0	185.83	96	406	1.01	370.98	365	12	6.68E-03	98.4	5.74E+00	
0	328.38	75	131	0.87	655.83	651	10	5.24E-03	61.5	3.83E+00	
0	420.87	28	86	1.77	840.66	836	8	1.93E-03	****	3.16E+00	
0	624.11	17	80	0.44	1246.79	1241	11	1.18E-03	****	2.29E+00	
0	742.13	15	49	0.55	1482.66	1478	10	1.08E-03	****	1.97E+00	
0	800.21	7	30	0.48	1598.73	1594	8	4.94E-04	****	1.84E+00	
0	837.27	40	56	4.65	1672.80	1664	15	2.80E-03	86.8	1.77E+00	
0	1152.52	42	68	10.27	2302.87	2288	30	2.93E-03	****	1.31E+00	
0	1172.08	8	15	0.52	2341.95	2337	7	5.22E-04	****	1.29E+00	T
0	1326.07	26	14	3.09	2649.74	2641	19	1.77E-03	81.2	1.15E+00	
0	1648.19	9	6	0.52	3293.61	3284	13	5.97E-04	****	9.75E-01	
0	1650.73	6	1	0.64	3298.68	3296	7	4.07E-04	****	9.74E-01	
0	1806.26	15	6	3.85	3609.59	3603	12	1.07E-03	81.2	9.23E-01	
0	1952.64	14	3	3.33	3902.21	3896	12	9.87E-04	71.8	8.92E-01	
0	1965.73	6	12	3.45	3928.38	3918	12	4.09E-04	****	8.90E-01	
0	2009.85	21	0	4.94	4016.57	4008	17	1.46E-03	43.6	8.84E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701011            *
* Acquisition date : 13-DEC-2007 07:39:40 Detector SN#    :                 *
* Detector ID      : GAM02                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:03.58     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701011           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1308E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-OCT-2007 15:13:16 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	2.894E+00	5.430E-01	1.510E-01	5.430E-01
CS-137	2.752E-01	4.710E-02	1.924E-02	4.710E-02
EU-155	1.225E-01	8.221E-02	4.490E-02	8.221E-02
TL-208	1.474E-01	4.803E-02	1.501E-02	4.803E-02
BI-212	4.309E-01	2.585E-01	1.276E-01	2.585E-01
PB-212	3.522E-01	6.548E-02	3.821E-02	6.548E-02
BI-214	3.404E-01	9.257E-02	3.228E-02	9.257E-02
PB-214	3.668E-01	8.737E-02	3.108E-02	8.737E-02
RA-223	2.235E-01	1.429E-01	7.461E-02	1.429E-01
AC-228	5.801E-01	1.564E-01	6.045E-02	1.564E-01
PA-234M	2.887E+00	4.051E+00	1.947E+00	4.051E+00
TH-234	8.772E-01	5.135E-01	2.230E-01	5.135E-01
U-235	7.706E-02	1.357E-01	8.045E-02	1.357E-01
NP-237	1.869E-01	1.241E-01	1.121E-01	1.241E-01
AM-243	9.072E-02	4.013E-02	2.373E-02	4.013E-02
CM-243	1.103E-01	7.397E-02	4.007E-02	7.397E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	9.944E-03	1.843E-02	1.997E-02	1.843E-02	FAIL ABUN
RH-101	7.300E-03	1.975E-02	1.544E-02	1.975E-02	NOT IDENT.
SB-125	1.178E-02	5.589E-02	4.737E-02	5.589E-02	NOT IDENT.
PO-209	2.394E+00	3.811E+00	3.367E+00	3.811E+00	NOT IDENT.
BI-211	-3.161E-01	6.738E-01	4.524E-01	6.738E-01	NOT IDENT.
PA-233	2.253E-02	3.405E-02	3.026E-02	3.405E-02	NOT IDENT.
NP-236	-9.845E-03	3.636E-02	2.704E-02	3.636E-02	NOT IDENT.
NP-239	6.591E-03	1.232E-01	1.008E-01	1.232E-01	NOT IDENT.
AM-241	1.585E-03	1.018E-01	8.153E-02	1.018E-01	NOT IDENT.
AM-246	-9.994E-03	6.577E-02	5.494E-02	6.577E-02	NOT IDENT.
CF-249	-1.420E-02	2.283E-02	1.846E-02	2.283E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	234.4929
63.29	237.9662
74.66	287.0813
74.81	287.1926
74.81	287.1926
77.11	288.8726
77.11	288.8726
86.48	355.1256
87.30	391.2845
87.30	391.2845
92.58	313.7509
98.44	237.7379
103.76	216.2826
105.31	223.2722
129.07	225.3056
143.76	211.1527
198.00	198.9053
209.25	245.0113
228.18	192.2751
238.63	424.4531
242.00	173.2513
269.46	135.9171
270.25	148.0930
277.36	154.6648
295.22	170.8219
300.09	121.9252
312.17	121.7500
338.32	138.1692
351.93	119.0706
387.59	130.5471
409.46	107.9929
427.87	109.4156
463.00	97.3230
510.77	70.3843
583.19	63.2826
609.31	80.9125
661.66	84.3631
727.33	61.0751
763.13	72.0650
768.36	70.2222
785.37	45.4735
794.95	47.3491
806.17	56.6338
831.80	58.3780
860.56	45.8530
896.60	34.8732
911.20	43.5675
934.06	45.0116
964.77	54.1846
968.97	48.8397
1001.03	40.2465
1078.86	32.8623
1120.29	30.9916
1155.19	35.5893
1173.23	28.1871
1238.11	30.5648
1280.96	28.9445
1332.51	15.6200
1377.67	22.8361
1401.50	27.8405
1407.98	37.1836
1460.80	19.8906
1509.23	22.2493
1588.20	30.2297
1620.50	20.5114
1729.60	10.5082
1764.49	15.1589

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701011

Total Uranium Activity	3.5656E-02	ug/g
Total Uranium Counting Unc.	6.2788E-02	ug/g
Total Uranium Tpu	6.2788E-08	ug/g
Total Uranium Mda	3.7226E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:56:40.01

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701012.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 08:29:45
Sample ID         : G198701012           Sample quantity  : 1.18310E+02 GRAM
Detector name     : GAM19                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00         Elapsed real time: 0 04:00:01.86  0.0%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708130               Detector SN#     :
Matrix Spike ID  :                       LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.74*	42	282	2.20	93.12	89	9	2.91E-03	83.1	
2	0	56.10	85	484	5.05	111.82	106	14	5.93E-03	55.6	
3	0	63.54*	103	573	1.33	126.69	120	14	7.14E-03	52.8	
4	2	74.95*	252	376	1.21	149.49	145	13	1.75E-02	14.6	2.18E+00
5	2	77.32*	390	350	1.14	154.21	145	13	2.71E-02	10.0	
6	4	87.46	184	293	1.37	174.48	171	22	1.28E-02	15.8	2.28E+00
7	4	90.04	142	362	1.39	179.63	171	22	9.88E-03	25.0	
8	4	92.76*	129	327	1.35	185.08	171	22	8.99E-03	30.9	
9	0	105.84	108	441	4.82	211.21	206	14	7.47E-03	42.4	
10	0	130.46	114	441	2.89	260.41	253	14	7.93E-03	40.3	
11	0	134.77	35	250	1.76	269.02	267	8	2.41E-03	80.5	
12	0	144.27*	43	299	1.35	288.01	284	9	2.98E-03	79.3	
13	0	185.94*	147	314	1.33	371.28	367	10	1.02E-02	26.4	
14	0	209.24	55	320	1.08	417.85	413	10	3.85E-03	61.8	
15	3	238.71*	844	201	1.33	476.73	471	17	5.86E-02	5.0	1.09E+00
16	3	241.77	266	225	1.90	482.85	471	17	1.85E-02	15.8	
17	0	270.50	142	343	1.73	540.27	532	18	9.90E-03	31.6	
18	0	277.25	46	185	2.58	553.76	550	9	3.16E-03	55.8	
19	0	295.28*	312	286	1.30	589.79	583	13	2.16E-02	12.9	
20	0	300.50	61	194	0.88	600.24	596	9	4.25E-03	43.1	
21	0	328.42	24	207	0.98	656.02	651	11	1.66E-03	118.7	
22	0	338.44	189	222	1.57	676.06	670	13	1.31E-02	17.8	
23	0	352.01*	604	170	1.57	703.17	697	15	4.20E-02	6.6	
24	0	409.70	14	132	0.82	818.48	814	8	9.47E-04	148.6	
25	0	453.19	44	108	2.13	905.40	897	12	3.08E-03	49.3	
26	0	463.15	47	139	1.51	925.31	918	13	3.25E-03	54.1	
27	0	476.49	32	111	3.92	951.98	947	12	2.20E-03	68.9	
28	0	511.03*	142	165	2.12	1021.02	1012	20	9.84E-03	28.9	
29	1	569.18*	66	126	1.80	1137.25	1131	19	4.60E-03	36.6	2.42E+00
30	1	573.39	29	80	1.81	1145.67	1131	19	2.00E-03	63.3	
31	0	583.45*	247	131	1.56	1165.79	1158	15	1.71E-02	12.6	
32	0	595.81	66	118	6.92	1190.49	1180	19	4.61E-03	41.2	
33	0	609.58*	355	147	1.26	1218.01	1211	14	2.46E-02	9.6	
34	0	662.00	269	104	1.58	1322.79	1316	13	1.87E-02	9.9	
35	0	715.18	28	61	3.64	1429.11	1422	11	1.92E-03	58.6	
36	0	727.85	64	76	1.70	1454.45	1449	12	4.44E-03	29.9	
37	0	768.57	45	124	1.76	1535.86	1528	18	3.11E-03	59.7	
38	0	861.44	31	25	1.85	1721.54	1718	8	2.13E-03	35.1	

Sample ID : G198701012 Acquisition date : 13-DEC-2007 08:29:45

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	911.82*	206	48	1.75	1822.25	1814	16	1.43E-02	11.0	
40	0	934.70	34	48	2.98	1868.00	1859	15	2.36E-03	47.9	
41	0	969.53	105	100	1.04	1937.64	1928	16	7.28E-03	23.5	
42	2	1001.09*	16	46	2.22	2000.76	1985	32	1.09E-03	103.2	1.88E+00
43	2	1005.40	26	39	2.02	2009.37	1985	32	1.83E-03	52.3	
44	0	1047.77	19	36	1.94	2094.09	2084	13	1.35E-03	67.4	
45	0	1120.93	83	51	2.23	2240.38	2234	12	5.77E-03	20.4	
46	0	1164.09	10	47	4.80	2326.71	2313	15	7.02E-04	153.2	
47	0	1238.71	57	30	3.35	2475.94	2470	12	3.96E-03	23.3	
48	0	1299.34	47	35	9.20	2597.19	2584	24	3.23E-03	37.1	
49	0	1374.03	8	17	1.40	2746.57	2739	10	5.40E-04	106.6	
50	0	1378.88	24	33	1.79	2756.28	2751	13	1.64E-03	55.9	
51	2	1415.37	11	2	1.61	2829.26	2828	15	7.41E-04	23.9	1.38E+00
52	2	1418.04	14	19	2.19	2834.60	2828	15	9.81E-04	70.2	
53	0	1461.62*	409	14	2.10	2921.77	2914	15	2.84E-02	5.6	
54	0	1483.10	12	15	0.79	2964.74	2958	11	8.45E-04	69.9	
55	0	1528.23	11	14	0.69	3055.00	3050	9	7.29E-04	70.2	
56	0	1588.17	25	10	0.59	3174.91	3168	13	1.77E-03	32.1	
57	0	1622.79	12	22	1.27	3244.17	3238	11	8.33E-04	81.0	
58	0	1742.17	15	12	0.99	3482.98	3477	15	1.05E-03	54.8	
59	0	1766.87	75	41	2.46	3532.41	3519	22	5.21E-03	25.2	
60	6	1845.47	9	11	2.63	3689.67	3687	13	6.49E-04	54.8	3.48E+00
61	6	1848.54	22	5	1.75	3695.81	3687	13	1.53E-03	29.4	
62	0	1890.99	12	0	1.49	3780.75	3777	9	8.33E-04	28.9	
63	0	1994.49	15	9	4.89	3987.84	3980	14	1.05E-03	51.5	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701012       *
* Acquisition date : 13-DEC-2007 08:29:45 Detector SN#    :                 *
* Detector ID      : GAM19                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.86     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701012           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1831E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  6-MAR-2007 21:45:12 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.125E+00	6.403E-01	2.722E-01	0.000E+00
CS-137	2.144E-01	4.497E-02	3.495E-02	0.000E+00
EU-155	1.199E-01	9.994E-02	9.011E-02	0.000E+00
TL-208	1.774E-01	4.555E-02	2.957E-02	0.000E+00
BI-212	3.959E-01	2.346E-01	2.516E-01	0.000E+00
PB-212	6.020E-01	6.964E-02	5.314E-02	0.000E+00
PB-214	6.584E-01	9.357E-02	6.141E-02	0.000E+00
RA-223	3.508E-01	2.182E-01	1.538E-01	0.000E+00
AC-228	7.103E-01	1.688E-01	1.181E-01	0.000E+00
PA-234M	1.814E+00	3.675E+00	3.631E+00	0.000E+00
TH-234	5.860E-01	3.568E-01	4.096E-01	0.000E+00
U-235	9.129E-02	1.419E-01	1.805E-01	0.000E+00
NP-237	3.822E-01	1.208E-01	2.004E-01	0.000E+00
AM-243	1.156E-01	3.382E-02	4.511E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	2.069E-03		2.179E-02	3.733E-02	0.000E+00	NOT IDENT.
RH-101	1.535E-03		2.073E-02	3.272E-02	0.000E+00	NOT IDENT.
SB-125	-1.987E-03		5.218E-02	8.975E-02	0.000E+00	NOT IDENT.
PO-209	1.240E+00		3.753E+00	6.399E+00	0.000E+00	NOT IDENT.
BI-211	-4.238E-03		5.619E-01	9.316E-01	0.000E+00	NOT IDENT.
BI-214	0.000E+00		9.780E-02	1.444E-01	0.000E+00	FAIL ABUN
PA-233	-7.714E-03		3.506E-02	5.728E-02	0.000E+00	NOT IDENT.
NP-236	-2.895E-03		3.607E-02	5.201E-02	0.000E+00	NOT IDENT.
NP-239	-3.886E-02		1.179E-01	1.948E-01	0.000E+00	NOT IDENT.
AM-241	3.715E-02		1.023E-01	1.198E-01	0.000E+00	NOT IDENT.
CM-243	1.396E-02		5.370E-02	8.300E-02	0.000E+00	NOT IDENT.
AM-246	2.818E-02		7.140E-02	1.263E-01	0.000E+00	NOT IDENT.
CF-249	-1.708E-03		2.212E-02	3.817E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:56:42.01

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701012.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 08:29:45
Sample ID        : G198701012           Sample quantity  : 1.18310E+02 GRAM
Detector name    : GAM19                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.86  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	409	10.66*	1.188E+00	5.125E+00	5.125E+00	12.75
CS-137	661.66	269	85.10*	2.351E+00	2.133E-01	2.144E-01	21.41
EU-155	105.31	108	21.20*	6.910E+00	1.165E-01	1.199E-01	85.02
TL-208	277.36	46	6.31	4.621E+00	2.477E-01	2.477E-01	111.85
	510.77	142	22.60	2.904E+00	3.426E-01	3.426E-01	58.21
	583.19	247	84.50*	2.610E+00	1.774E-01	1.774E-01	26.20
	763.13	------	1.81	2.083E+00	------	Line Not Found	------
	860.56	31	12.42	1.874E+00	2.090E-01	2.090E-01	70.99
BI-212	727.33	64	11.80*	2.169E+00	3.959E-01	3.959E-01	60.46
	785.37	------	1.10	2.031E+00	------	Line Not Found	------
	1620.50	------	1.49	1.102E+00	------	Line Not Found	------
PB-212	74.81	252	10.40	5.077E+00	7.581E-01	7.581E-01	29.85
	77.11	390	17.50	5.328E+00	6.632E-01	6.632E-01	21.10
	87.30	184	7.81	6.172E+00	6.068E-01	6.068E-01	32.26
	238.63	844	43.30*	5.139E+00	6.020E-01	6.020E-01	11.80
	300.09	61	3.28	4.357E+00	6.789E-01	6.789E-01	86.48
PB-214	74.81	252	6.44	5.077E+00	1.224E+00	1.224E+00	29.85
	77.11	390	10.80	5.328E+00	1.075E+00	1.075E+00	21.10
	87.30	184	4.84	6.172E+00	9.791E-01	9.792E-01	32.26
	242.00	266	7.43	5.093E+00	1.115E+00	1.115E+00	32.15
	295.22	312	19.30	4.413E+00	5.804E-01	5.805E-01	26.65
	351.93	604	37.60*	3.872E+00	6.583E-01	6.584E-01	14.50
RA-223	269.46	142	13.70*	4.704E+00	3.508E-01	3.508E-01	63.46
AC-228	129.07	114	2.42	6.972E+00	1.074E+00	1.074E+00	80.91
	209.25	55	3.89	5.613E+00	4.030E-01	4.030E-01	123.74
	270.25	142	3.46	4.704E+00	1.389E+00	1.389E+00	63.46
	338.32	189	11.27	3.988E+00	6.668E-01	6.668E-01	36.09
	409.46	14	1.92	3.451E+00	3.264E-01	3.264E-01	297.17
	463.00	47	4.40	3.138E+00	5.376E-01	5.376E-01	108.33
	794.95	------	4.25	2.010E+00	------	Line Not Found	------
	911.20	206	25.80*	1.782E+00	7.103E-01	7.103E-01	24.25
	964.77	------	4.99	1.695E+00	------	Line Not Found	------

Sample ID : G198701012 Acquisition date : 13-DEC-2007 08:29:45

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	968.97	105	15.80	1.687E+00	6.241E-01	6.241E-01	47.90
	1588.20	25	3.22	1.118E+00	1.122E+00	1.122E+00	64.45
PA-234M	1001.03	16	0.84*	1.640E+00	1.814E+00	1.814E+00	206.68
TH-234	63.29	103	4.80	3.590E+00	9.468E-01	9.468E-01	105.88
	92.58	129	5.41*	6.476E+00	5.860E-01	5.860E-01	62.13
U-235	143.76	43	10.96*	6.797E+00	9.129E-02	9.129E-02	158.63
NP-237	86.48	184	12.40*	6.172E+00	3.822E-01	3.822E-01	32.26
AM-243	74.66	252	68.20*	5.077E+00	1.156E-01	1.156E-01	29.85

Flag: "*" = Keyline

Sample ID : G198701012 Acquisition date : 13-DEC-2007 08:29:45

Total number of lines in spectrum 63
Number of unidentified lines 28
Number of lines tentatively identified by NID 35 55.56%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.125E+00	5.125E+00	0.653E+00	12.75	
CS-137	9.47E+08S	1.00	2.133E-01	2.144E-01	0.459E-01	21.41	
EU-155	1.57E+08S	1.03	1.165E-01	1.199E-01	1.020E-01	85.02	
TL-208	4.43E+17S	1.00	1.774E-01	1.774E-01	0.465E-01	26.20	
BI-212	4.43E+17S	1.00	3.959E-01	3.959E-01	2.393E-01	60.46	
PB-212	4.43E+17S	1.00	6.020E-01	6.020E-01	0.711E-01	11.80	
PB-214	5.05E+10S	1.00	6.583E-01	6.584E-01	0.955E-01	14.50	
RA-223	1.04E+12S	1.00	3.508E-01	3.508E-01	2.226E-01	63.46	
AC-228	4.43E+17S	1.00	7.103E-01	7.103E-01	1.723E-01	24.25	
PA-234M	1.41E+17S	1.00	1.814E+00	1.814E+00	3.750E+00	206.68	
TH-234	1.41E+17S	1.00	5.860E-01	5.860E-01	3.641E-01	62.13	
U-235	2.22E+16S	1.00	9.129E-02	9.129E-02	14.48E-02	158.63	
NP-237	6.75E+13S	1.00	3.822E-01	3.822E-01	1.233E-01	32.26	
AM-243	2.33E+11S	1.00	1.156E-01	1.156E-01	0.345E-01	29.85	
			---	---			
	Total Activity :		1.134E+01	1.134E+01			

Grand Total Activity : 1.134E+01 1.134E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701012 Acquisition date : 13-DEC-2007 08:29:45

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.74	42	282	2.20	93.12	89	9	2.91E-03	****	1.11E+00	
0	56.10	85	484	5.05	111.82	106	14	5.93E-03	****	2.45E+00	
4	90.04	142	362	1.39	179.63	171	22	9.88E-03	50.0	6.33E+00	
0	134.77	35	250	1.76	269.02	267	8	2.41E-03	****	6.93E+00	
0	185.94	147	314	1.33	371.28	367	10	1.02E-02	52.8	6.03E+00	
0	328.42	24	207	0.98	656.02	651	11	1.66E-03	****	4.08E+00	
0	453.19	44	108	2.13	905.40	897	12	3.08E-03	98.5	3.19E+00	
0	476.49	32	111	3.92	951.98	947	12	2.20E-03	****	3.07E+00	
1	569.18	66	126	1.80	1137.25	1131	19	4.60E-03	73.2	2.66E+00	
1	573.39	29	80	1.81	1145.67	1131	19	2.00E-03	****	2.65E+00	
0	595.81	66	118	6.92	1190.49	1180	19	4.61E-03	82.3	2.57E+00	
0	609.58	355	147	1.26	1218.01	1211	14	2.46E-02	19.1	2.52E+00	T
0	715.18	28	61	3.64	1429.11	1422	11	1.92E-03	****	2.20E+00	
0	768.57	45	124	1.76	1535.86	1528	18	3.11E-03	****	2.07E+00	T
0	934.70	34	48	2.98	1868.00	1859	15	2.36E-03	95.9	1.74E+00	T
2	1005.40	26	39	2.02	2009.37	1985	32	1.83E-03	****	1.63E+00	
0	1047.77	19	36	1.94	2094.09	2084	13	1.35E-03	****	1.57E+00	
0	1120.93	83	51	2.23	2240.38	2234	12	5.77E-03	40.8	1.48E+00	T
0	1164.09	10	47	4.80	2326.71	2313	15	7.02E-04	****	1.44E+00	
0	1238.71	57	30	3.35	2475.94	2470	12	3.96E-03	46.7	1.36E+00	T
0	1299.34	47	35	9.20	2597.19	2584	24	3.23E-03	74.2	1.31E+00	
0	1374.03	8	17	1.40	2746.57	2739	10	5.40E-04	****	1.25E+00	
0	1378.88	24	33	1.79	2756.28	2751	13	1.64E-03	****	1.24E+00	T
2	1415.37	11	2	1.61	2829.26	2828	15	7.41E-04	47.8	1.22E+00	
2	1418.04	14	19	2.19	2834.60	2828	15	9.81E-04	****	1.22E+00	
0	1483.10	12	15	0.79	2964.74	2958	11	8.45E-04	****	1.18E+00	
0	1528.23	11	14	0.69	3055.00	3050	9	7.29E-04	****	1.15E+00	
0	1622.79	12	22	1.27	3244.17	3238	11	8.33E-04	****	1.10E+00	
0	1742.17	15	12	0.99	3482.98	3477	15	1.05E-03	****	1.05E+00	
0	1766.87	75	41	2.46	3532.41	3519	22	5.21E-03	50.4	1.04E+00	
6	1845.47	9	11	2.63	3689.67	3687	13	6.49E-04	****	1.02E+00	
6	1848.54	22	5	1.75	3695.81	3687	13	1.53E-03	58.9	1.02E+00	
0	1890.99	12	0	1.49	3780.75	3777	9	8.33E-04	57.7	1.01E+00	
0	1994.49	15	9	4.89	3987.84	3980	14	1.05E-03	****	9.85E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701012            *
* Acquisition date : 13-DEC-2007 08:29:45 Detector SN#    :                 *
* Detector ID      : GAM19                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.86     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701012           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1831E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  6-MAR-2007 21:45:12 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.125E+00	6.403E-01	1.362E-01	6.403E-01
CS-137	2.144E-01	4.497E-02	1.749E-02	4.497E-02
EU-155	1.199E-01	9.994E-02	4.508E-02	9.994E-02
TL-208	1.774E-01	4.555E-02	1.479E-02	4.555E-02
BI-212	3.959E-01	2.346E-01	1.259E-01	2.346E-01
PB-212	6.020E-01	6.964E-02	2.658E-02	6.964E-02
PB-214	6.584E-01	9.357E-02	3.072E-02	9.357E-02
RA-223	3.508E-01	2.182E-01	7.696E-02	2.182E-01
AC-228	7.103E-01	1.688E-01	5.907E-02	1.688E-01
PA-234M	1.814E+00	3.675E+00	1.817E+00	3.675E+00
TH-234	5.860E-01	3.568E-01	2.049E-01	3.568E-01
U-235	9.129E-02	1.419E-01	9.033E-02	1.419E-01
NP-237	3.822E-01	1.208E-01	1.003E-01	1.208E-01
AM-243	1.156E-01	3.382E-02	2.257E-02	3.382E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.069E-03	2.179E-02	1.868E-02	2.179E-02	NOT IDENT.
RH-101	1.535E-03	2.073E-02	1.637E-02	2.073E-02	NOT IDENT.
SB-125	-1.987E-03	5.218E-02	4.490E-02	5.218E-02	NOT IDENT.
PO-209	1.240E+00	3.753E+00	3.201E+00	3.753E+00	NOT IDENT.
BI-211	-4.238E-03	5.619E-01	4.661E-01	5.619E-01	NOT IDENT.
BI-214	4.850E-01	9.780E-02	7.225E-02	9.780E-02	FAIL ABUN
PA-233	-7.714E-03	3.506E-02	2.866E-02	3.506E-02	NOT IDENT.
NP-236	-2.895E-03	3.607E-02	2.602E-02	3.607E-02	NOT IDENT.
NP-239	-3.886E-02	1.179E-01	9.748E-02	1.179E-01	NOT IDENT.
AM-241	3.715E-02	1.023E-01	5.994E-02	1.023E-01	NOT IDENT.
CM-243	1.396E-02	5.370E-02	4.152E-02	5.370E-02	NOT IDENT.
AM-246	2.818E-02	7.140E-02	6.317E-02	7.140E-02	NOT IDENT.
CF-249	-1.708E-03	2.212E-02	1.909E-02	2.212E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	258.8898
63.29	347.8633
74.66	417.3286
74.81	417.4012
74.81	417.4012
77.11	402.0669
77.11	402.0669
86.48	400.1209
87.30	415.7529
87.30	415.7529
92.58	357.3325
98.44	296.8254
103.76	282.8198
105.31	285.9598
129.07	262.2557
143.76	318.4677
198.00	282.0259
209.25	262.9967
228.18	233.0300
238.63	248.3603
242.00	224.8109
269.46	175.9462
270.25	176.0201
277.36	188.9209
295.22	187.1123
300.09	178.7153
312.17	164.6392
338.32	157.6559
351.93	143.2145
387.59	150.0308
409.46	137.4474
427.87	130.0342
463.00	117.5593
510.77	110.9065
583.19	77.0479
609.31	83.6534
661.66	88.0047
727.33	75.5605
763.13	52.0142
768.36	58.3352
785.37	50.2230
794.95	74.4703
806.17	67.3203
831.80	64.5772
860.56	49.0401
896.60	47.3118
911.20	53.9478
934.06	46.6386
964.77	56.4272
968.97	64.4967
1001.03	45.8700
1078.86	45.6963
1120.29	45.1406
1155.19	27.5965
1173.23	47.5138
1238.11	37.5194
1280.96	39.7555
1332.51	23.4863
1377.67	35.5078
1401.50	20.7975
1407.98	30.7338
1460.80	22.0045
1509.23	38.3077
1588.20	40.2468
1620.50	21.1021
1729.60	21.8947
1764.49	22.0049

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701012

Total Uranium Activity	4.2242E-02	ug/g
Total Uranium Counting Unc.	6.5666E-02	ug/g
Total Uranium Tpu	6.5666E-08	ug/g
Total Uranium Mda	4.1794E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:57:18.42

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701013.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 08:56:13
Sample ID        : G198701013           Sample quantity  : 1.27910E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.43  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.34*	6	377	1.17	92.14	90	6	4.42E-04	548.8	
2	0	62.82*	110	841	1.13	125.07	120	11	7.65E-03	55.0	
3	8	74.60*	588	1291	2.42	148.63	141	18	4.09E-02	15.0	1.12E+01
4	8	77.00*	872	744	1.49	153.43	141	18	6.06E-02	7.1	
5	5	84.18*	80	662	1.23	167.77	162	29	5.54E-03	56.4	2.16E+00
6	5	87.05	357	714	1.27	173.53	162	29	2.48E-02	13.9	
7	5	89.73	226	426	0.90	178.87	162	29	1.57E-02	15.3	
8	5	92.51*	211	555	1.20	184.43	162	29	1.46E-02	24.3	
9	0	105.38	59	493	1.20	210.16	207	7	4.10E-03	63.6	
10	0	128.62	154	715	0.96	256.62	253	10	1.07E-02	33.4	
11	0	178.51	47	488	1.29	356.36	354	8	3.26E-03	82.7	
12	0	185.75*	355	755	1.60	370.83	365	12	2.47E-02	17.9	
13	0	208.49	252	835	1.53	416.28	408	15	1.75E-02	25.8	
14	3	238.43*	1953	356	1.32	476.14	467	22	1.36E-01	3.0	2.51E+00
15	3	241.51	589	432	1.78	482.30	467	22	4.09E-02	9.4	
16	0	257.73	78	413	1.06	514.74	510	11	5.40E-03	52.0	
17	0	269.47	286	488	2.14	538.20	531	15	1.99E-02	17.8	
18	0	276.91	119	396	1.63	553.07	547	12	8.30E-03	34.6	
19	0	284.92	14	477	3.84	569.09	564	13	9.79E-04	320.5	
20	0	295.00*	798	372	1.33	589.25	584	11	5.54E-02	6.1	
21	0	300.06	144	385	1.60	599.36	595	12	1.00E-02	28.4	
22	0	327.72	156	328	1.10	654.66	649	11	1.08E-02	23.8	
23	0	338.28*	344	500	1.32	675.77	668	15	2.39E-02	15.6	
24	0	351.70*	1390	432	1.36	702.60	695	14	9.65E-02	4.2	
25	0	388.29	27	212	1.00	775.77	773	8	1.90E-03	94.5	
26	0	408.70	73	304	0.86	816.57	812	13	5.04E-03	50.8	
27	0	414.62	59	190	1.50	828.40	824	10	4.12E-03	45.7	
28	0	462.38	141	294	1.66	923.90	917	15	9.82E-03	27.7	
29	0	510.55*	236	252	2.51	1020.22	1012	19	1.64E-02	22.2	
30	0	561.38	27	194	0.82	1121.86	1121	12	1.88E-03	103.7	
31	0	582.70*	613	190	1.90	1164.50	1155	15	4.26E-02	6.7	
32	0	609.12*	1033	274	1.60	1217.33	1208	17	7.17E-02	4.9	
33	0	661.31	351	166	1.78	1321.71	1316	12	2.44E-02	9.1	
34	0	726.89	156	163	0.87	1452.85	1445	13	1.08E-02	18.7	
35	0	769.28	198	228	4.91	1537.62	1526	26	1.37E-02	22.0	
36	0	785.25	80	158	4.17	1569.57	1560	17	5.58E-03	37.5	
37	0	794.32	104	108	1.58	1587.69	1582	12	7.20E-03	22.3	
38	0	837.22	58	211	1.25	1673.49	1664	21	4.02E-03	63.9	

Sample ID : G198701013 Acquisition date : 13-DEC-2007 08:56:13

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	860.65*	85	156	1.73	1720.35	1711	18	5.93E-03	38.9	
40	0	910.75*	431	157	1.89	1820.56	1813	18	2.99E-02	8.9	
41	0	934.91	65	95	1.33	1868.88	1858	15	4.53E-03	34.7	
42	2	964.26	106	116	2.79	1927.60	1919	25	7.37E-03	26.4	1.20E+00
43	2	968.53*	275	77	2.31	1936.13	1919	25	1.91E-02	10.3	
44	0	1086.15	22	104	9.05	2171.41	2156	21	1.52E-03	118.8	
45	0	1096.80	50	143	8.22	2192.71	2179	27	3.45E-03	69.5	
46	0	1119.79*	228	139	2.21	2238.70	2229	18	1.58E-02	14.4	
47	0	1205.82	50	181	12.87	2410.79	2395	30	3.45E-03	80.0	
48	0	1238.11*	79	151	0.95	2475.39	2466	24	5.52E-03	43.2	
49	0	1266.27	7	57	1.25	2531.73	2521	12	5.13E-04	207.6	
50	0	1377.39	93	49	2.14	2754.06	2746	15	6.49E-03	19.3	
51	0	1400.79	49	24	4.37	2800.86	2794	13	3.39E-03	25.7	
52	0	1408.17	37	36	1.55	2815.62	2810	12	2.57E-03	36.4	
53	0	1460.12*	1071	94	2.71	2919.58	2906	29	7.43E-02	4.1	
54	5	1476.97	39	26	4.32	2953.29	2946	30	2.70E-03	30.7	2.53E+00
55	5	1484.32	31	26	2.69	2968.00	2946	30	2.14E-03	41.9	
56	0	1512.84	25	84	5.09	3025.06	3012	17	1.75E-03	87.7	
57	0	1631.21	21	38	0.83	3261.91	3254	15	1.45E-03	70.2	
58	0	1662.06	51	45	6.77	3323.66	3314	21	3.53E-03	36.4	
59	1	1697.71	29	20	2.82	3395.00	3385	24	2.02E-03	36.1	4.37E+00
60	1	1701.21	20	7	2.83	3402.00	3385	24	1.37E-03	42.9	
61	0	1729.68	45	72	1.70	3458.97	3444	21	3.10E-03	50.2	
62	0	1763.52	272	18	3.06	3526.70	3516	19	1.89E-02	7.2	
63	0	1845.78	22	36	4.26	3691.32	3683	16	1.52E-03	65.1	
64	0	2041.62	8	16	2.06	4083.29	4074	12	5.27E-04	98.7	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701013       *
* Acquisition date : 13-DEC-2007 08:56:13 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.43     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701013           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2791E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	7.381E+00	7.300E-01	2.268E-01	0.000E+00
CS-137	1.585E-01	3.129E-02	2.983E-02	0.000E+00
EU-155	4.597E-02	5.743E-02	8.978E-02	0.000E+00
TL-208	2.522E-01	3.844E-02	2.702E-02	0.000E+00
BI-212	5.440E-01	2.052E-01	2.076E-01	0.000E+00
PB-212	9.091E-01	7.540E-02	4.630E-02	0.000E+00
BI-214	8.050E-01	1.008E-01	5.190E-02	0.000E+00
PB-214	9.254E-01	9.301E-02	5.408E-02	0.000E+00
RA-223	4.496E-01	1.593E-01	1.428E-01	0.000E+00
AC-228	8.316E-01	1.665E-01	1.090E-01	0.000E+00
TH-234	6.613E-01	3.193E-01	3.712E-01	0.000E+00
NP-237	5.105E-01	1.454E-01	1.692E-01	0.000E+00
AM-243	1.821E-01	5.539E-02	3.807E-02	0.000E+00
CM-243	4.136E-02	5.167E-02	8.211E-02	0.000E+00
CF-249	1.100E-02	2.039E-02	3.101E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	1.750E-03	1.845E-02	3.083E-02	0.000E+00	NOT IDENT.
RH-101	-6.781E-03	1.915E-02	2.972E-02	0.000E+00	NOT IDENT.
SB-125	2.334E-02	4.445E-02	7.660E-02	0.000E+00	NOT IDENT.
PO-209	-4.994E-01	3.246E+00	5.490E+00	0.000E+00	NOT IDENT.
BI-211	3.957E-01	5.254E-01	8.194E-01	0.000E+00	NOT IDENT.
PA-233	-2.969E-03	3.015E-02	5.201E-02	0.000E+00	NOT IDENT.
PA-234M	1.159E+00	2.563E+00	3.474E+00	0.000E+00	NOT IDENT.
U-235	-9.517E-02	1.085E-01	1.751E-01	0.000E+00	NOT IDENT.
NP-236	3.079E-02	3.266E-02	5.232E-02	0.000E+00	NOT IDENT.
NP-239	-5.733E-02	1.204E-01	1.847E-01	0.000E+00	NOT IDENT.
AM-241	6.258E-02	6.702E-02	1.063E-01	0.000E+00	NOT IDENT.
AM-246	1.399E-02	6.722E-02	9.794E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:57:19.35

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701013.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 08:56:13
Sample ID        : G198701013           Sample quantity  : 1.27910E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.43  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	1071	10.66*	1.997E+00	7.381E+00	7.381E+00	10.09
CS-137	661.66	351	85.10*	3.836E+00	1.577E-01	1.585E-01	20.14
EU-155	105.31	59	21.20*	9.146E+00	4.464E-02	4.597E-02	127.49
TL-208	277.36	119	6.31	6.715E+00	4.137E-01	4.137E-01	69.53
	510.77	236	22.60	4.633E+00	3.302E-01	3.302E-01	44.93
	583.19	613	84.50*	4.220E+00	2.522E-01	2.522E-01	15.55
	763.13	------	1.81	3.420E+00	------	Line Not Found	------
	860.56	85	12.42	3.091E+00	3.265E-01	3.265E-01	78.37
BI-212	727.33	156	11.80*	3.559E+00	5.440E-01	5.440E-01	38.49
	785.37	80	1.10	3.340E+00	3.209E+00	3.209E+00	75.52
	1620.50	------	1.49	1.873E+00	------	Line Not Found	------
PB-212	74.81	588	10.40	6.953E+00	1.194E+00	1.194E+00	31.05
	77.11	872	17.50	7.267E+00	1.006E+00	1.006E+00	16.38
	87.30	357	7.81	8.280E+00	8.105E-01	8.105E-01	29.07
	238.63	1953	43.30*	7.278E+00	9.091E-01	9.091E-01	8.46
	300.09	144	3.28	6.421E+00	1.005E+00	1.005E+00	57.17
BI-214	609.31	1033	46.10*	4.084E+00	8.049E-01	8.050E-01	12.78
	768.36	198	4.94	3.398E+00	1.730E+00	1.730E+00	45.09
	806.17	------	1.22	3.268E+00	------	Line Not Found	------
	934.06	65	3.03	2.878E+00	1.098E+00	1.098E+00	69.98
	1120.29	228	15.10	2.461E+00	8.989E-01	8.990E-01	29.69
	1155.19	------	1.63	2.397E+00	------	Line Not Found	------
	1238.11	79	5.79	2.262E+00	8.902E-01	8.902E-01	86.69
	1280.96	------	1.43	2.201E+00	------	Line Not Found	------
	1377.67	93	4.00	2.081E+00	1.646E+00	1.647E+00	39.03
	1401.50	49	1.27	2.056E+00	2.740E+00	2.740E+00	51.82
	1407.98	37	2.15	2.048E+00	1.233E+00	1.233E+00	72.96
	1509.23	------	2.11	1.953E+00	------	Line Not Found	------
	1729.60	45	2.92	1.815E+00	1.238E+00	1.238E+00	100.47
	1764.49	272	15.40	1.801E+00	1.440E+00	1.440E+00	15.40
PB-214	74.81	588	6.44	6.953E+00	1.928E+00	1.928E+00	31.05
	77.11	872	10.80	7.267E+00	1.631E+00	1.631E+00	16.38

Sample ID : G198701013 Acquisition date : 13-DEC-2007 08:56:13

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	357	4.84	8.280E+00	1.308E+00	1.308E+00	29.07
	242.00	589	7.43	7.229E+00	1.609E+00	1.609E+00	19.81
	295.22	798	19.30	6.483E+00	9.361E-01	9.362E-01	13.49
	351.93	1390	37.60*	5.861E+00	9.254E-01	9.254E-01	10.26
RA-223	269.46	286	13.70*	6.816E+00	4.496E-01	4.496E-01	36.16
AC-228	129.07	154	2.42	9.242E+00	1.010E+00	1.010E+00	67.12
	209.25	252	3.89	7.794E+00	1.220E+00	1.220E+00	51.99
	270.25	286	3.46	6.816E+00	1.780E+00	1.780E+00	36.16
	338.32	344	11.27	5.996E+00	7.469E-01	7.469E-01	31.67
	409.46	73	1.92	5.354E+00	1.035E+00	1.035E+00	101.84
	463.00	141	4.40	4.950E+00	9.522E-01	9.522E-01	55.74
	794.95	104	4.25	3.309E+00	1.081E+00	1.081E+00	45.68
	911.20	431	25.80*	2.944E+00	8.316E-01	8.316E-01	20.44
	964.77	106	4.99	2.802E+00	1.114E+00	1.114E+00	53.65
	968.97	275	15.80	2.791E+00	9.146E-01	9.146E-01	22.67
	1588.20	------	3.22	1.894E+00	------	Line Not Found	------
TH-234	63.29	110	4.80	4.988E+00	6.750E-01	6.750E-01	110.25
	92.58	211	5.41*	8.650E+00	6.613E-01	6.613E-01	49.28
NP-237	86.48	357	12.40*	8.280E+00	5.105E-01	5.105E-01	29.07
AM-243	74.66	588	68.20*	6.953E+00	1.821E-01	1.821E-01	31.05
CM-243	103.76	59	23.00*	9.146E+00	4.115E-02	4.136E-02	127.49
CF-249	387.59	27	66.00*	5.525E+00	1.100E-02	1.100E-02	189.09

Flag: "*" = Keyline

Sample ID : G198701013 Acquisition date : 13-DEC-2007 08:56:13

Total number of lines in spectrum 64
Number of unidentified lines 24
Number of lines tentatively identified by NID 40 62.50%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	7.381E+00	7.381E+00	0.745E+00	10.09	
CS-137	9.47E+08S	1.00	1.577E-01	1.585E-01	0.319E-01	20.14	
EU-155	1.57E+08S	1.03	4.464E-02	4.597E-02	5.860E-02	127.49	
TL-208	4.43E+17S	1.00	2.522E-01	2.522E-01	0.392E-01	15.55	
BI-212	4.43E+17S	1.00	5.440E-01	5.440E-01	2.094E-01	38.49	
PB-212	4.43E+17S	1.00	9.091E-01	9.091E-01	0.769E-01	8.46	
BI-214	5.05E+10S	1.00	8.049E-01	8.050E-01	1.029E-01	12.78	
PB-214	5.05E+10S	1.00	9.254E-01	9.254E-01	0.949E-01	10.26	
RA-223	1.04E+12S	1.00	4.496E-01	4.496E-01	1.626E-01	36.16	
AC-228	4.43E+17S	1.00	8.316E-01	8.316E-01	1.699E-01	20.44	
TH-234	1.41E+17S	1.00	6.613E-01	6.613E-01	3.258E-01	49.28	
NP-237	6.75E+13S	1.00	5.105E-01	5.105E-01	1.484E-01	29.07	
AM-243	2.33E+11S	1.00	1.821E-01	1.821E-01	0.565E-01	31.05	
CM-243	8.99E+08S	1.01	4.115E-02	4.136E-02	5.273E-02	127.49	
CF-249	1.11E+10S	1.00	1.100E-02	1.100E-02	2.080E-02	189.09	
			---	---			
	Total Activity :		1.371E+01	1.371E+01			

Grand Total Activity : 1.371E+01 1.371E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701013 Acquisition date : 13-DEC-2007 08:56:13

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.34	6	377	1.17	92.14	90	6	4.42E-04	****	1.66E+00	
5	84.18	80	662	1.23	167.77	162	29	5.54E-03	****	8.04E+00	
5	89.73	226	426	0.90	178.87	162	29	1.57E-02	30.7	8.48E+00	
0	178.51	47	488	1.29	356.36	354	8	3.26E-03	****	8.38E+00	
0	185.75	355	755	1.60	370.83	365	12	2.47E-02	35.9	8.23E+00	
0	257.73	78	413	1.06	514.74	510	11	5.40E-03	****	6.98E+00	
0	284.92	14	477	3.84	569.09	564	13	9.79E-04	****	6.61E+00	
0	327.72	156	328	1.10	654.66	649	11	1.08E-02	47.7	6.11E+00	
0	414.62	59	190	1.50	828.40	824	10	4.12E-03	91.5	5.31E+00	
0	561.38	27	194	0.82	1121.86	1121	12	1.88E-03	****	4.34E+00	
0	837.22	58	211	1.25	1673.49	1664	21	4.02E-03	****	3.16E+00	
0	1086.15	22	104	9.05	2171.41	2156	21	1.52E-03	****	2.53E+00	
0	1096.80	50	143	8.22	2192.71	2179	27	3.45E-03	****	2.51E+00	
0	1205.82	50	181	12.87	2410.79	2395	30	3.45E-03	****	2.31E+00	
0	1266.27	7	57	1.25	2531.73	2521	12	5.13E-04	****	2.22E+00	
5	1476.97	39	26	4.32	2953.29	2946	30	2.70E-03	61.4	1.98E+00	
5	1484.32	31	26	2.69	2968.00	2946	30	2.14E-03	83.7	1.97E+00	
0	1512.84	25	84	5.09	3025.06	3012	17	1.75E-03	****	1.95E+00	
0	1631.21	21	38	0.83	3261.91	3254	15	1.45E-03	****	1.87E+00	
0	1662.06	51	45	6.77	3323.66	3314	21	3.53E-03	72.9	1.85E+00	
1	1697.71	29	20	2.82	3395.00	3385	24	2.02E-03	72.3	1.83E+00	
1	1701.21	20	7	2.83	3402.00	3385	24	1.37E-03	85.7	1.83E+00	
0	1845.78	22	36	4.26	3691.32	3683	16	1.52E-03	****	1.77E+00	
0	2041.62	8	16	2.06	4083.29	4074	12	5.27E-04	****	1.75E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701013            *
* Acquisition date : 13-DEC-2007 08:56:13 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.43     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701013           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2791E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	7.381E+00	7.300E-01	1.135E-01	7.300E-01
CS-137	1.585E-01	3.129E-02	1.492E-02	3.129E-02
EU-155	4.597E-02	5.743E-02	4.492E-02	5.743E-02
TL-208	2.522E-01	3.844E-02	1.352E-02	3.844E-02
BI-212	5.440E-01	2.052E-01	1.038E-01	2.052E-01
PB-212	9.091E-01	7.540E-02	2.316E-02	7.540E-02
BI-214	8.050E-01	1.008E-01	2.596E-02	1.008E-01
PB-214	9.254E-01	9.301E-02	2.705E-02	9.301E-02
RA-223	4.496E-01	1.593E-01	7.146E-02	1.593E-01
AC-228	8.316E-01	1.665E-01	5.455E-02	1.665E-01
TH-234	6.613E-01	3.193E-01	1.857E-01	3.193E-01
NP-237	5.105E-01	1.454E-01	8.464E-02	1.454E-01
AM-243	1.821E-01	5.539E-02	1.905E-02	5.539E-02
CM-243	4.136E-02	5.167E-02	4.108E-02	5.167E-02
CF-249	1.100E-02	2.039E-02	1.551E-02	2.039E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.750E-03	1.845E-02	1.542E-02	1.845E-02	NOT IDENT.
RH-101	-6.781E-03	1.915E-02	1.487E-02	1.915E-02	NOT IDENT.
SB-125	2.334E-02	4.445E-02	3.832E-02	4.445E-02	NOT IDENT.
PO-209	-4.994E-01	3.246E+00	2.746E+00	3.246E+00	NOT IDENT.
BI-211	3.957E-01	5.254E-01	4.100E-01	5.254E-01	NOT IDENT.
PA-233	-2.969E-03	3.015E-02	2.602E-02	3.015E-02	NOT IDENT.
PA-234M	1.159E+00	2.563E+00	1.738E+00	2.563E+00	NOT IDENT.
U-235	-9.517E-02	1.085E-01	8.759E-02	1.085E-01	NOT IDENT.
NP-236	3.079E-02	3.266E-02	2.617E-02	3.266E-02	NOT IDENT.
NP-239	-5.733E-02	1.204E-01	9.242E-02	1.204E-01	NOT IDENT.
AM-241	6.258E-02	6.702E-02	5.318E-02	6.702E-02	NOT IDENT.
AM-246	1.399E-02	6.722E-02	4.900E-02	6.722E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	467.1938
63.29	568.4232
74.66	641.5920
74.81	641.8385
74.81	641.8385
77.11	645.6064
77.11	645.6064
86.48	588.4205
87.30	589.5387
87.30	589.5387
92.58	596.6243
98.44	524.7639
103.76	580.5937
105.31	566.8653
129.07	571.4174
143.76	618.4465
198.00	515.9800
209.25	497.1625
228.18	469.4731
238.63	432.2490
242.00	433.8545
269.46	362.8114
270.25	363.1018
277.36	348.8000
295.22	356.1113
300.09	319.4051
312.17	330.3729
338.32	328.0666
351.93	291.6998
387.59	263.9219
409.46	284.6497
427.87	238.8675
463.00	231.5829
510.77	195.1615
583.19	193.5855
609.31	199.4150
661.66	196.6839
727.33	159.5556
763.13	142.0850
768.36	149.1032
785.37	122.8884
794.95	137.4911
806.17	143.9453
831.80	127.9711
860.56	120.4445
896.60	129.8349
911.20	145.0614
934.06	78.5150
964.77	97.6430
968.97	79.5159
1001.03	103.8966
1078.86	95.1179
1120.29	127.3065
1155.19	109.2631
1173.23	104.5867
1238.11	128.1558
1280.96	86.8094
1332.51	73.5415
1377.67	71.3896
1401.50	64.8303
1407.98	59.6734
1460.80	50.0336
1509.23	90.0201
1588.20	66.0508
1620.50	49.9102
1729.60	47.7299
1764.49	29.1972

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701013

Total Uranium Activity	-4.4034E-02	ug/g
Total Uranium Counting Unc.	5.0195E-02	ug/g
Total Uranium Tpu	5.0195E-08	ug/g
Total Uranium Mda	4.0529E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:57:53.96

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701014.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 09:03:59
Sample ID        : G198701014           Sample quantity  : 1.06190E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.57  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.30*	5	492	1.02	93.38	89	10	3.31E-04	*****	
2	0	63.08*	166	591	1.15	126.92	123	10	1.16E-02	30.3	
3	2	74.71*	640	586	1.31	150.16	143	17	4.44E-02	8.1	2.86E+00
4	2	77.02*	949	527	1.09	154.78	143	17	6.59E-02	5.6	
5	5	84.26*	154	449	1.68	169.25	165	28	1.07E-02	26.2	3.09E+00
6	5	87.15*	413	428	1.32	175.03	165	28	2.87E-02	10.3	
7	5	89.97	300	405	1.32	180.66	165	28	2.08E-02	13.1	
8	5	92.71*	350	385	1.39	186.14	165	28	2.43E-02	12.8	
9	0	99.05	99	432	1.87	198.82	195	9	6.87E-03	39.2	
10	0	105.20	50	387	1.59	211.11	209	8	3.49E-03	69.6	
11	0	110.87	208	534	5.18	222.45	216	13	1.44E-02	23.9	
12	0	116.02	92	331	2.37	232.75	229	8	6.39E-03	35.9	
13	0	144.12*	45	346	1.07	288.89	286	8	3.11E-03	78.2	
14	0	153.95	38	508	0.65	308.55	303	11	2.65E-03	115.4	
15	0	185.93*	201	571	1.35	372.46	365	14	1.40E-02	27.9	
16	0	210.13	44	443	0.99	420.83	415	10	3.08E-03	90.2	
17	3	238.72*	1228	240	1.27	477.97	472	20	8.53E-02	3.8	1.53E+00
18	3	241.76	324	360	1.93	484.05	472	20	2.25E-02	15.8	
19	0	259.29	18	205	1.34	519.08	517	8	1.24E-03	141.7	
20	0	270.29	156	205	1.32	541.07	536	11	1.08E-02	19.5	
21	0	277.54	63	234	2.33	555.56	551	9	4.37E-03	45.7	
22	0	295.18*	429	263	1.31	590.80	584	13	2.98E-02	9.6	
23	0	300.66	106	293	1.31	601.75	597	13	7.36E-03	34.5	
24	0	323.24	26	252	1.43	646.88	639	13	1.80E-03	127.9	
25	0	327.79	77	140	1.70	655.97	652	8	5.37E-03	28.8	
26	0	338.48*	187	201	1.35	677.34	673	9	1.30E-02	16.3	
27	0	352.10*	713	240	1.36	704.55	699	14	4.95E-02	6.3	
28	0	440.62	25	104	0.63	881.44	879	8	1.74E-03	73.4	
29	0	464.33	46	236	0.73	928.81	920	15	3.19E-03	74.9	
30	0	511.03*	149	206	2.29	1022.14	1015	19	1.04E-02	29.0	
31	0	583.53	381	126	1.60	1166.99	1158	15	2.65E-02	8.2	
32	0	609.53*	457	120	1.67	1218.94	1213	12	3.18E-02	7.1	
33	0	632.85	45	94	3.33	1265.53	1258	13	3.15E-03	46.6	
34	0	661.76	198	133	1.29	1323.29	1317	13	1.37E-02	14.0	
35	0	728.12	91	114	1.83	1455.86	1447	17	6.29E-03	29.0	
36	0	769.40	35	89	0.98	1538.32	1534	10	2.46E-03	52.2	
37	0	795.86	60	77	1.91	1591.19	1584	16	4.20E-03	34.7	
38	0	854.58	17	63	0.50	1708.47	1698	12	1.18E-03	98.1	

Sample ID : G198701014 Acquisition date : 13-DEC-2007 09:03:59

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	861.14	51	41	1.51	1721.58	1717	11	3.57E-03	27.9	
40	0	911.73*	214	100	1.47	1822.63	1815	16	1.49E-02	12.8	
41	0	934.23*	19	60	1.64	1867.58	1859	14	1.35E-03	96.4	
42	0	965.57	47	59	1.78	1930.17	1924	10	3.23E-03	34.4	
43	0	969.34	166	37	1.61	1937.69	1933	10	1.15E-02	10.4	
44	0	1001.42	40	59	2.84	2001.78	1993	15	2.75E-03	45.5	
45	0	1121.16*	127	27	1.74	2240.90	2235	16	8.84E-03	13.5	
46	0	1130.81	62	29	5.68	2260.18	2251	19	4.27E-03	24.4	
47	0	1240.38	40	78	1.96	2478.98	2469	21	2.78E-03	57.6	
48	0	1268.71	18	21	1.97	2535.56	2532	9	1.27E-03	50.1	
49	0	1298.17	39	24	5.92	2594.38	2586	16	2.70E-03	32.4	
50	0	1378.62	39	14	3.05	2755.01	2750	10	2.72E-03	24.3	
51	0	1411.54	21	26	3.06	2820.74	2814	15	1.48E-03	56.5	
52	0	1461.50*	323	33	1.95	2920.49	2909	20	2.24E-02	7.1	
53	0	1500.86	11	64	5.44	2999.06	2976	25	7.89E-04	197.6	
54	0	1552.69	19	11	1.35	3102.53	3093	16	1.31E-03	46.7	
55	0	1588.83	18	36	5.35	3174.69	3163	18	1.26E-03	81.1	
56	0	1647.96	11	6	4.00	3292.71	3287	11	7.29E-04	53.1	
57	0	1730.17	31	7	2.75	3456.82	3449	14	2.15E-03	25.5	
58	0	1741.52	10	19	5.24	3479.48	3469	16	6.61E-04	109.7	
59	0	1765.75*	74	19	1.80	3527.84	3521	13	5.17E-03	18.5	
60	4	1803.97	10	2	2.42	3604.12	3602	15	6.62E-04	34.1	6.76E-01
61	4	1808.02	14	1	2.78	3612.20	3602	15	9.92E-04	30.6	
62	0	1849.49	7	13	0.67	3694.97	3688	12	4.83E-04	107.7	
63	0	1917.83	10	5	2.40	3831.35	3826	10	6.94E-04	52.4	
64	0	1927.18	18	4	4.18	3850.01	3841	16	1.25E-03	34.3	
65	0	2004.32	17	3	2.47	4003.95	3997	13	1.17E-03	32.8	
66	0	2020.95	4	9	0.60	4037.15	4028	12	3.07E-04	143.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701014       *
* Acquisition date : 13-DEC-2007 09:03:59 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.57     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701014           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0619E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.488E+00	8.775E-01	4.292E-01	0.000E+00
CS-137	2.185E-01	6.240E-02	5.333E-02	0.000E+00
EU-155	6.262E-02	8.557E-02	1.220E-01	0.000E+00
TL-208	3.788E-01	6.664E-02	4.520E-02	0.000E+00
BI-212	7.808E-01	4.493E-01	3.752E-01	0.000E+00
PB-212	1.123E+00	1.247E-01	6.898E-02	0.000E+00
BI-214	8.649E-01	1.362E-01	9.567E-02	0.000E+00
PB-214	1.024E+00	1.381E-01	9.154E-02	0.000E+00
RA-223	4.957E-01	1.926E-01	2.139E-01	0.000E+00
AC-228	1.020E+00	2.723E-01	2.056E-01	0.000E+00
PA-234M	6.257E+00	5.607E+00	5.832E+00	0.000E+00
TH-234	1.611E+00	4.284E-01	4.709E-01	0.000E+00
U-235	1.186E-01	1.821E-01	2.491E-01	0.000E+00
NP-236	6.580E-02	5.085E-02	6.076E-02	0.000E+00
NP-237	8.183E-01	1.794E-01	2.019E-01	0.000E+00
AM-243	2.262E-01	4.008E-02	3.896E-02	0.000E+00
CM-243	5.635E-02	7.699E-02	1.022E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	1.838E-02	3.421E-02	6.010E-02	0.000E+00	NOT IDENT.
RH-101	2.806E-03	3.067E-02	4.633E-02	0.000E+00	NOT IDENT.
SB-125	3.096E-03	7.749E-02	1.294E-01	0.000E+00	NOT IDENT.
PO-209	1.324E+00	6.241E+00	1.050E+01	0.000E+00	NOT IDENT.
BI-211	2.298E-01	8.530E-01	1.449E+00	0.000E+00	NOT IDENT.
PA-233	-1.656E-03	5.168E-02	8.769E-02	0.000E+00	NOT IDENT.
NP-239	1.096E-02	1.782E-01	2.922E-01	0.000E+00	NOT IDENT.
AM-241	2.336E-02	4.182E-02	6.576E-02	0.000E+00	NOT IDENT.
AM-246	-4.588E-02	1.001E-01	1.621E-01	0.000E+00	NOT IDENT.
CF-249	-6.117E-03	3.199E-02	5.309E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:57:54.89

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701014.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 09:03:59
Sample ID        : G198701014           Sample quantity  : 1.06190E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.57  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	323	10.66*	9.765E-01	5.488E+00	5.488E+00	16.32
CS-137	661.66	198	85.10*	1.888E+00	2.174E-01	2.185E-01	29.14
EU-155	105.31	50	21.20*	6.886E+00	6.082E-02	6.262E-02	139.43
TL-208	277.36	63	6.31	3.979E+00	4.431E-01	4.431E-01	91.68
	510.77	149	22.60	2.367E+00	4.929E-01	4.929E-01	58.39
	583.19	381	84.50*	2.107E+00	3.788E-01	3.788E-01	17.95
	763.13	------	1.81	1.670E+00	------	Line Not Found	------
	860.56	51	12.42	1.507E+00	4.849E-01	4.849E-01	56.57
BI-212	727.33	91	11.80*	1.738E+00	7.808E-01	7.808E-01	58.72
	785.37	------	1.10	1.629E+00	------	Line Not Found	------
	1620.50	------	1.49	8.967E-01	------	Line Not Found	------
PB-212	74.81	640	10.40	7.332E+00	1.483E+00	1.483E+00	18.08
	77.11	949	17.50	7.311E+00	1.312E+00	1.312E+00	13.93
	87.30	413	7.81	7.189E+00	1.299E+00	1.299E+00	22.38
	238.63	1228	43.30*	4.465E+00	1.123E+00	1.123E+00	11.34
	300.09	106	3.28	3.732E+00	1.530E+00	1.530E+00	69.36
BI-214	609.31	457	46.10*	2.028E+00	8.648E-01	8.649E-01	16.07
	768.36	35	4.94	1.658E+00	7.646E-01	7.647E-01	104.86
	806.17	------	1.22	1.594E+00	------	Line Not Found	------
	934.06	19	3.03	1.408E+00	8.060E-01	8.061E-01	193.04
	1120.29	127	15.10	1.212E+00	1.229E+00	1.229E+00	27.81
	1155.19	------	1.63	1.183E+00	------	Line Not Found	------
	1238.11	------	5.79	1.118E+00	------	Line Not Found	------
	1280.96	------	1.43	1.087E+00	------	Line Not Found	------
	1377.67	39	4.00	1.024E+00	1.690E+00	1.690E+00	49.27
	1401.50	------	1.27	1.011E+00	------	Line Not Found	------
	1407.98	------	2.15	1.007E+00	------	Line Not Found	------
	1509.23	------	2.11	9.511E-01	------	Line Not Found	------
	1729.60	31	2.92	8.487E-01	2.211E+00	2.211E+00	51.42
	1764.49	74	15.40	8.341E-01	1.025E+00	1.025E+00	37.43
PB-214	74.81	640	6.44	7.332E+00	2.396E+00	2.396E+00	18.08
	77.11	949	10.80	7.311E+00	2.125E+00	2.126E+00	13.93

Sample ID : G198701014 Acquisition date : 13-DEC-2007 09:03:59

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	413	4.84	7.189E+00	2.096E+00	2.097E+00	22.38
	242.00	324	7.43	4.424E+00	1.743E+00	1.743E+00	32.66
	295.22	429	19.30	3.788E+00	1.037E+00	1.037E+00	20.24
	351.93	713	37.60*	3.273E+00	1.024E+00	1.024E+00	13.76
RA-223	269.46	156	13.70*	4.063E+00	4.957E-01	4.957E-01	39.64
AC-228	129.07	------	2.42	6.409E+00	------	Line Not Found	------
	209.25	44	3.89	4.889E+00	4.122E-01	4.122E-01	180.60
	270.25	156	3.46	4.063E+00	1.963E+00	1.963E+00	39.64
	338.32	187	11.27	3.384E+00	8.648E-01	8.648E-01	33.11
	409.46	------	1.92	2.874E+00	------	Line Not Found	------
	463.00	46	4.40	2.575E+00	7.155E-01	7.155E-01	150.00
	794.95	60	4.25	1.611E+00	1.561E+00	1.561E+00	70.03
	911.20	214	25.80*	1.437E+00	1.020E+00	1.020E+00	27.23
	964.77	47	4.99	1.370E+00	1.203E+00	1.203E+00	69.31
	968.97	166	15.80	1.366E+00	1.361E+00	1.361E+00	22.44
	1588.20	18	3.22	9.115E-01	1.091E+00	1.091E+00	162.46
PA-234M	1001.03	40	0.84*	1.329E+00	6.257E+00	6.257E+00	91.44
TH-234	63.29	166	4.80	7.386E+00	8.294E-01	8.294E-01	61.09
	92.58	350	5.41*	7.105E+00	1.611E+00	1.611E+00	27.13
U-235	143.76	45	10.96*	6.100E+00	1.186E-01	1.186E-01	156.72
NP-236	98.44	99	38.00*	6.998E+00	6.580E-02	6.580E-02	78.85
NP-237	86.48	413	12.40*	7.189E+00	8.183E-01	8.183E-01	22.38
AM-243	74.66	640	68.20*	7.332E+00	2.262E-01	2.262E-01	18.08
CM-243	103.76	50	23.00*	6.886E+00	5.606E-02	5.635E-02	139.43

Flag: "*" = Keyline

Sample ID : G198701014 Acquisition date : 13-DEC-2007 09:03:59

Total number of lines in spectrum 66
Number of unidentified lines 29
Number of lines tentatively identified by NID 37 56.06%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.488E+00	5.488E+00	0.895E+00	16.32	
CS-137	9.47E+08S	1.00	2.174E-01	2.185E-01	0.637E-01	29.14	
EU-155	1.57E+08S	1.03	6.082E-02	6.262E-02	8.731E-02	139.43	
TL-208	4.43E+17S	1.00	3.788E-01	3.788E-01	0.680E-01	17.95	
BI-212	4.43E+17S	1.00	7.808E-01	7.808E-01	4.585E-01	58.72	
PB-212	4.43E+17S	1.00	1.123E+00	1.123E+00	0.127E+00	11.34	
BI-214	5.05E+10S	1.00	8.648E-01	8.649E-01	1.390E-01	16.07	
PB-214	5.05E+10S	1.00	1.024E+00	1.024E+00	0.141E+00	13.76	
RA-223	1.04E+12S	1.00	4.957E-01	4.957E-01	1.965E-01	39.64	
AC-228	4.43E+17S	1.00	1.020E+00	1.020E+00	0.278E+00	27.23	
PA-234M	1.41E+17S	1.00	6.257E+00	6.257E+00	5.721E+00	91.44	
TH-234	1.41E+17S	1.00	1.611E+00	1.611E+00	0.437E+00	27.13	
U-235	2.22E+16S	1.00	1.186E-01	1.186E-01	1.858E-01	156.72	
NP-236	4.89E+12S	1.00	6.580E-02	6.580E-02	5.188E-02	78.85	
NP-237	6.75E+13S	1.00	8.183E-01	8.183E-01	1.831E-01	22.38	
AM-243	2.33E+11S	1.00	2.262E-01	2.262E-01	0.409E-01	18.08	
CM-243	8.99E+08S	1.01	5.606E-02	5.635E-02	7.857E-02	139.43	
			---	---			
	Total Activity :		2.061E+01	2.061E+01			

Grand Total Activity : 2.061E+01 2.061E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701014 Acquisition date : 13-DEC-2007 09:03:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.30	5	492	1.02	93.38	89	10	3.31E-04	****	7.29E+00	
5	84.26	154	449	1.68	169.25	165	28	1.07E-02	52.4	7.23E+00	
5	89.97	300	405	1.32	180.66	165	28	2.08E-02	26.3	7.15E+00	
0	110.87	208	534	5.18	222.45	216	13	1.44E-02	47.8	6.78E+00	
0	116.02	92	331	2.37	232.75	229	8	6.39E-03	71.7	6.68E+00	
0	153.95	38	508	0.65	308.55	303	11	2.65E-03	****	5.90E+00	
0	185.93	201	571	1.35	372.46	365	14	1.40E-02	55.8	5.30E+00	
0	259.29	18	205	1.34	519.08	517	8	1.24E-03	****	4.20E+00	
0	323.24	26	252	1.43	646.88	639	13	1.80E-03	****	3.52E+00	
0	327.79	77	140	1.70	655.97	652	8	5.37E-03	57.6	3.48E+00	
0	440.62	25	104	0.63	881.44	879	8	1.74E-03	****	2.70E+00	
0	632.85	45	94	3.33	1265.53	1258	13	3.15E-03	93.2	1.96E+00	
0	854.58	17	63	0.50	1708.47	1698	12	1.18E-03	****	1.52E+00	
0	1130.81	62	29	5.68	2260.18	2251	19	4.27E-03	48.8	1.20E+00	
0	1240.38	40	78	1.96	2478.98	2469	21	2.78E-03	****	1.12E+00	
0	1268.71	18	21	1.97	2535.56	2532	9	1.27E-03	****	1.10E+00	
0	1298.17	39	24	5.92	2594.38	2586	16	2.70E-03	64.9	1.08E+00	
0	1411.54	21	26	3.06	2820.74	2814	15	1.48E-03	****	1.00E+00	
0	1500.86	11	64	5.44	2999.06	2976	25	7.89E-04	****	9.55E-01	
0	1552.69	19	11	1.35	3102.53	3093	16	1.31E-03	93.5	9.29E-01	
0	1647.96	11	6	4.00	3292.71	3287	11	7.29E-04	****	8.84E-01	
0	1741.52	10	19	5.24	3479.48	3469	16	6.61E-04	****	8.44E-01	
4	1803.97	10	2	2.42	3604.12	3602	15	6.62E-04	68.1	8.19E-01	
4	1808.02	14	1	2.78	3612.20	3602	15	9.92E-04	61.1	8.17E-01	
0	1849.49	7	13	0.67	3694.97	3688	12	4.83E-04	****	8.02E-01	
0	1917.83	10	5	2.40	3831.35	3826	10	6.94E-04	****	7.77E-01	
0	1927.18	18	4	4.18	3850.01	3841	16	1.25E-03	68.7	7.73E-01	
0	2004.32	17	3	2.47	4003.95	3997	13	1.17E-03	65.5	7.47E-01	
0	2020.95	4	9	0.60	4037.15	4028	12	3.07E-04	****	7.41E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701014            *
* Acquisition date : 13-DEC-2007 09:03:59 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.57     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701014           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0619E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.488E+00	8.775E-01	2.147E-01	8.775E-01
CS-137	2.185E-01	6.240E-02	2.668E-02	6.240E-02
EU-155	6.262E-02	8.557E-02	6.105E-02	8.557E-02
TL-208	3.788E-01	6.664E-02	2.261E-02	6.664E-02
BI-212	7.808E-01	4.493E-01	1.877E-01	4.493E-01
PB-212	1.123E+00	1.247E-01	3.451E-02	1.247E-01
BI-214	8.649E-01	1.362E-01	4.786E-02	1.362E-01
PB-214	1.024E+00	1.381E-01	4.580E-02	1.381E-01
RA-223	4.957E-01	1.926E-01	1.070E-01	1.926E-01
AC-228	1.020E+00	2.723E-01	1.029E-01	2.723E-01
PA-234M	6.257E+00	5.607E+00	2.918E+00	5.607E+00
TH-234	1.611E+00	4.284E-01	2.356E-01	4.284E-01
U-235	1.186E-01	1.821E-01	1.246E-01	1.821E-01
NP-236	6.580E-02	5.085E-02	3.040E-02	5.085E-02
NP-237	8.183E-01	1.794E-01	1.010E-01	1.794E-01
AM-243	2.262E-01	4.008E-02	1.949E-02	4.008E-02
CM-243	5.635E-02	7.699E-02	5.111E-02	7.699E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.838E-02	3.421E-02	3.007E-02	3.421E-02	NOT IDENT.
RH-101	2.806E-03	3.067E-02	2.318E-02	3.067E-02	NOT IDENT.
SB-125	3.096E-03	7.749E-02	6.473E-02	7.749E-02	NOT IDENT.
PO-209	1.324E+00	6.241E+00	5.253E+00	6.241E+00	NOT IDENT.
BI-211	2.298E-01	8.530E-01	7.247E-01	8.530E-01	NOT IDENT.
PA-233	-1.656E-03	5.168E-02	4.387E-02	5.168E-02	NOT IDENT.
NP-239	1.096E-02	1.782E-01	1.462E-01	1.782E-01	NOT IDENT.
AM-241	2.336E-02	4.182E-02	3.290E-02	4.182E-02	NOT IDENT.
AM-246	-4.588E-02	1.001E-01	8.110E-02	1.001E-01	NOT IDENT.
CF-249	-6.117E-03	3.199E-02	2.656E-02	3.199E-02	NOT IDENT.

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
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ENERGY	MDA COUNTS
59.54	404.9232
63.29	483.9534
74.66	551.3337
74.81	551.4883
74.81	551.4883
77.11	553.8391
77.11	553.8391
86.48	472.3721
87.30	473.0301
87.30	473.0301
92.58	477.1881
98.44	381.4814
103.76	380.7265
105.31	436.1311
129.07	408.5741
143.76	406.7751
198.00	356.6429
209.25	358.3085
228.18	306.3979
238.63	261.8018
242.00	262.5558
269.46	209.8687
270.25	226.4707
277.36	245.3224
295.22	234.4828
300.09	180.0431
312.17	222.7124
338.32	180.0385
351.93	187.5517
387.59	171.7035
409.46	170.8916
427.87	150.0831
463.00	120.5043
510.77	138.5136
583.19	96.2664
609.31	118.9100
661.66	108.1399
727.33	88.3630
763.13	86.9803
768.36	93.9807
785.37	72.2051
794.95	62.0997
806.17	72.7339
831.80	75.4137
860.56	65.4413
896.60	71.8343
911.20	86.8096
934.06	79.4569
964.77	91.1429
968.97	56.5800
1001.03	63.4161
1078.86	56.5137
1120.29	53.3438
1155.19	41.3398
1173.23	57.9555
1238.11	53.2661
1280.96	40.6797
1332.51	45.1962
1377.67	45.6670
1401.50	33.3298
1407.98	50.0664
1460.80	29.9771
1509.23	33.4208
1588.20	44.5840
1620.50	18.1633
1729.60	23.5021
1764.49	18.2596

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701014

Total Uranium Activity	5.4869E-02	ug/g
Total Uranium Counting Unc.	8.4273E-02	ug/g
Total Uranium Tpu	8.4273E-08	ug/g
Total Uranium Mda	5.7673E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:58:29.53

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701015.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 10:59:29
Sample ID        : G198701015           Sample quantity  : 1.18480E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:01.27  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           :
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	45.95*	10	403	0.99	91.88	88	10	6.88E-04	421.1	
2	0	63.33*	97	424	1.41	126.59	122	9	6.74E-03	42.8	
3	1	74.93*	356	331	1.24	149.77	143	17	2.47E-02	10.6	2.01E+00
4	1	77.16*	453	326	1.10	154.23	143	17	3.15E-02	8.8	
5	10	84.20*	72	407	2.04	168.29	164	27	5.00E-03	53.1	2.93E+00
6	10	87.32*	184	355	1.25	174.51	164	27	1.28E-02	19.1	
7	10	90.08	92	252	0.86	180.03	164	27	6.38E-03	27.9	
8	10	92.87*	188	502	1.68	185.61	164	27	1.31E-02	26.1	
9	2	127.36	43	237	1.45	254.50	251	10	2.96E-03	63.2	1.44E+00
10	2	129.08	65	209	0.97	257.93	251	10	4.51E-03	37.5	
11	0	143.93*	2	332	1.15	287.60	284	9	1.53E-04	*****	
12	0	176.85	39	245	1.75	353.36	351	7	2.74E-03	67.7	
13	0	185.81*	119	411	1.16	371.27	365	12	8.28E-03	39.2	
14	0	198.62*	23	283	1.84	396.87	393	9	1.58E-03	145.5	
15	0	209.15	79	315	1.20	417.91	414	10	5.49E-03	43.5	
16	0	218.50	34	241	0.96	436.57	433	8	2.35E-03	81.9	
17	4	238.64*	845	188	1.04	476.81	472	16	5.87E-02	4.7	1.22E+00
18	4	241.48	212	298	1.92	482.49	472	16	1.47E-02	21.4	
19	0	269.89	105	217	1.65	539.26	534	10	7.27E-03	28.1	
20	0	295.18*	317	163	1.42	589.80	585	10	2.20E-02	10.1	
21	0	299.08	53	189	1.60	597.58	595	9	3.70E-03	48.1	
22	0	328.74	79	240	3.80	656.85	651	13	5.46E-03	42.4	
23	0	338.24	168	137	1.38	675.83	672	8	1.17E-02	14.3	
24	0	351.93*	532	171	1.18	703.20	697	13	3.69E-02	7.1	
25	0	408.65	58	139	2.57	816.55	809	13	4.05E-03	43.7	
26	0	454.12	42	90	1.09	907.42	902	11	2.92E-03	46.5	
27	3	462.93	52	122	1.95	925.03	917	22	3.59E-03	45.7	1.37E+00
28	3	465.88	26	95	1.61	930.94	917	22	1.83E-03	74.1	
29	0	511.31*	70	211	2.45	1021.73	1012	23	4.84E-03	66.0	
30	0	531.35	17	59	1.76	1061.79	1058	8	1.18E-03	81.8	
31	0	583.50*	254	80	1.45	1166.05	1160	13	1.76E-02	10.6	
32	0	596.38	29	32	1.27	1191.79	1189	8	2.01E-03	38.6	
33	1	603.89	26	53	1.70	1206.82	1204	23	1.83E-03	44.4	1.27E+00
34	1	609.48*	389	72	1.55	1218.00	1204	23	2.70E-02	7.0	
35	0	662.13	140	90	1.88	1323.25	1317	13	9.70E-03	16.4	
36	0	693.08	44	56	2.07	1385.13	1380	11	3.08E-03	35.7	
37	0	728.01*	59	92	1.94	1454.98	1448	13	4.08E-03	37.8	
38	0	795.67	46	99	0.76	1590.28	1581	18	3.19E-03	52.8	

Sample ID : G198701015 Acquisition date : 13-DEC-2007 10:59:29

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	807.37	13	25	1.00	1613.69	1610	6	9.28E-04	65.3	
40	0	836.93	27	61	2.02	1672.80	1666	15	1.89E-03	64.9	
41	0	860.97*	25	54	0.78	1720.89	1713	12	1.72E-03	65.9	
42	0	880.39	9	27	1.26	1759.73	1757	8	6.08E-04	107.2	
43	0	911.48*	175	56	1.91	1821.91	1815	14	1.22E-02	12.3	
44	0	926.67	13	25	1.65	1852.31	1848	8	9.17E-04	70.2	
45	0	935.59	18	45	1.07	1870.14	1864	12	1.27E-03	76.8	
46	0	965.36	31	55	0.70	1929.70	1924	11	2.18E-03	48.2	
47	0	969.38	113	30	1.30	1937.74	1934	9	7.82E-03	12.8	
48	0	1095.67	28	26	0.59	2190.40	2183	16	1.93E-03	46.3	
49	0	1121.26*	73	54	1.78	2241.60	2234	18	5.10E-03	27.2	
50	0	1155.44	25	22	1.95	2310.00	2305	11	1.74E-03	41.5	
51	0	1162.53	29	12	3.68	2324.18	2319	12	1.99E-03	30.7	
52	0	1199.94	11	21	0.78	2399.06	2392	9	7.70E-04	81.9	
53	0	1238.65	42	18	2.25	2476.51	2470	12	2.92E-03	25.4	
54	0	1271.76	14	12	1.39	2542.79	2538	11	1.00E-03	52.0	
55	0	1322.70	14	15	1.55	2644.75	2639	10	9.72E-04	58.2	
56	0	1378.35	20	22	1.38	2756.14	2750	13	1.37E-03	54.7	
57	0	1437.75	12	12	1.56	2875.06	2867	10	8.28E-04	62.4	
58	0	1461.57*	277	24	2.09	2922.74	2915	18	1.93E-02	7.8	
59	0	1469.95	13	4	1.14	2939.52	2935	8	9.11E-04	38.1	
60	0	1522.56	20	6	1.72	3044.85	3041	9	1.37E-03	32.6	
61	0	1526.68	8	3	1.03	3053.11	3049	7	5.37E-04	53.6	
62	0	1572.76	8	11	0.75	3145.38	3134	15	5.61E-04	96.8	
63	0	1579.19	25	17	5.08	3158.25	3149	17	1.75E-03	42.3	
64	0	1588.83	33	6	2.84	3177.55	3172	11	2.26E-03	22.4	
65	0	1678.13	8	1	0.60	3356.40	3353	6	5.25E-04	44.4	
66	0	1731.55	16	17	1.46	3463.39	3455	14	1.08E-03	62.6	
67	0	1765.77*	46	23	1.73	3531.93	3524	17	3.17E-03	32.8	
68	0	1776.24	9	7	4.29	3552.91	3545	13	6.51E-04	65.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701015       *
* Acquisition date : 13-DEC-2007 10:59:29 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:01.27     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701015           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1848E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.205E+00	5.552E-01	2.120E-01	0.000E+00
RH-101	8.211E-03	2.341E-02	2.771E-02	0.000E+00
CS-137	1.013E-01	3.327E-02	2.774E-02	0.000E+00
TL-208	1.656E-01	3.578E-02	2.811E-02	0.000E+00
BI-212	3.318E-01	2.469E-01	2.022E-01	0.000E+00
PB-212	5.531E-01	5.984E-02	4.584E-02	0.000E+00
BI-214	4.823E-01	7.331E-02	5.308E-02	0.000E+00
PB-214	5.266E-01	7.868E-02	5.638E-02	0.000E+00
RA-223	2.353E-01	1.305E-01	1.507E-01	0.000E+00
AC-228	5.536E-01	1.429E-01	1.028E-01	0.000E+00
TH-234	7.391E-01	3.858E-01	3.497E-01	0.000E+00
U-235	4.293E-03	1.385E-01	1.621E-01	0.000E+00
NP-237	3.259E-01	1.276E-01	1.583E-01	0.000E+00
AM-243	1.324E-01	3.094E-02	3.387E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	4.117E-03	1.823E-02	3.079E-02	0.000E+00	NOT IDENT.
SB-125	2.185E-02	4.582E-02	7.862E-02	0.000E+00	NOT IDENT.
EU-155	4.029E-02	4.607E-02	8.424E-02	0.000E+00	NOT IDENT.
PO-209	1.468E+00	3.219E+00	5.645E+00	0.000E+00	NOT IDENT.
BI-211	-6.715E-02	5.231E-01	7.506E-01	0.000E+00	NOT IDENT.
PA-233	1.782E-02	3.091E-02	5.396E-02	0.000E+00	NOT IDENT.
PA-234M	-4.904E-01	2.415E+00	3.733E+00	0.000E+00	NOT IDENT.
NP-236	-2.490E-02	3.062E-02	4.424E-02	0.000E+00	NOT IDENT.
NP-239	8.357E-02	1.078E-01	1.915E-01	0.000E+00	NOT IDENT.
AM-241	1.549E-02	5.851E-02	8.930E-02	0.000E+00	NOT IDENT.
CM-243	-8.738E-03	4.005E-02	7.063E-02	0.000E+00	NOT IDENT.
AM-246	4.138E-02	6.453E-02	1.139E-01	0.000E+00	NOT IDENT.
CF-249	1.144E-02	2.048E-02	3.536E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:58:30.53

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701015.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 10:59:29
Sample ID        : G198701015           Sample quantity  : 1.18480E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:01.27  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           :
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	277	10.66*	1.286E+00	3.205E+00	3.205E+00	17.68
RH-101	198.00	23	73.00*	6.284E+00	7.857E-03	8.211E-03	290.95
CS-137	661.66	140	85.10*	2.581E+00	1.008E-01	1.013E-01	33.52
TL-208	277.36	------	6.31	5.045E+00	------	Line Not Found	------
	510.77	70	22.60	3.198E+00	1.529E-01	1.529E-01	132.12
	583.19	254	84.50*	2.872E+00	1.656E-01	1.656E-01	22.05
	763.13	------	1.81	2.279E+00	------	Line Not Found	------
	860.56	25	12.42	2.045E+00	1.544E-01	1.544E-01	132.19
BI-212	727.33	59	11.80*	2.376E+00	3.318E-01	3.318E-01	75.94
	785.37	------	1.10	2.222E+00	------	Line Not Found	------
	1620.50	------	1.49	1.195E+00	------	Line Not Found	------
PB-212	74.81	356	10.40	6.239E+00	8.684E-01	8.684E-01	23.84
	77.11	453	17.50	6.458E+00	6.354E-01	6.354E-01	20.69
	87.30	184	7.81	7.200E+00	5.175E-01	5.175E-01	39.96
	238.63	845	43.30*	5.590E+00	5.531E-01	5.531E-01	11.04
	300.09	53	3.28	4.785E+00	5.378E-01	5.378E-01	96.42
BI-214	609.31	389	46.10*	2.769E+00	4.823E-01	4.823E-01	15.51
	768.36	------	4.94	2.266E+00	------	Line Not Found	------
	806.17	13	1.22	2.167E+00	8.009E-01	8.010E-01	130.91
	934.06	18	3.03	1.896E+00	5.052E-01	5.052E-01	153.91
	1120.29	73	15.10	1.608E+00	4.792E-01	4.793E-01	54.78
	1155.19	25	1.63	1.565E+00	1.552E+00	1.552E+00	83.14
	1238.11	42	5.79	1.472E+00	7.804E-01	7.805E-01	51.28
	1280.96	------	1.43	1.431E+00	------	Line Not Found	------
	1377.67	20	4.00	1.346E+00	5.785E-01	5.785E-01	109.84
	1401.50	------	1.27	1.329E+00	------	Line Not Found	------
	1407.98	------	2.15	1.324E+00	------	Line Not Found	------
	1509.23	------	2.11	1.256E+00	------	Line Not Found	------
	1729.60	16	2.92	1.148E+00	7.331E-01	7.332E-01	125.34
	1764.49	46	15.40	1.136E+00	4.134E-01	4.135E-01	65.96
PB-214	74.81	356	6.44	6.239E+00	1.402E+00	1.403E+00	23.84
	77.11	453	10.80	6.458E+00	1.030E+00	1.030E+00	20.69

Sample ID : G198701015 Acquisition date : 13-DEC-2007 10:59:29

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	184	4.84	7.200E+00	8.350E-01	8.351E-01	39.96
	242.00	212	7.43	5.546E+00	8.143E-01	8.144E-01	43.17
	295.22	317	19.30	4.829E+00	5.381E-01	5.381E-01	21.05
	351.93	532	37.60*	4.255E+00	5.265E-01	5.266E-01	15.25
RA-223	269.46	105	13.70*	5.141E+00	2.353E-01	2.353E-01	56.58
AC-228	129.07	65	2.42	7.644E+00	5.567E-01	5.567E-01	75.27
	209.25	79	3.89	6.088E+00	5.285E-01	5.285E-01	87.19
	270.25	105	3.46	5.141E+00	9.318E-01	9.318E-01	56.58
	338.32	168	11.27	4.380E+00	5.406E-01	5.406E-01	29.09
	409.46	58	1.92	3.807E+00	1.264E+00	1.264E+00	87.62
	463.00	52	4.40	3.459E+00	5.383E-01	5.383E-01	91.59
	794.95	46	4.25	2.196E+00	7.808E-01	7.808E-01	105.98
	911.20	175	25.80*	1.941E+00	5.536E-01	5.536E-01	26.34
	964.77	31	4.99	1.842E+00	5.416E-01	5.416E-01	96.84
	968.97	113	15.80	1.835E+00	6.154E-01	6.154E-01	27.10
	1588.20	33	3.22	1.211E+00	1.320E+00	1.320E+00	45.53
TH-234	63.29	97	4.80	4.733E+00	6.764E-01	6.764E-01	86.36
	92.58	188	5.41*	7.454E+00	7.391E-01	7.391E-01	53.26
U-235	143.76	2	10.96*	7.395E+00	4.293E-03	4.293E-03	3292.02
NP-237	86.48	184	12.40*	7.200E+00	3.259E-01	3.259E-01	39.96
AM-243	74.66	356	68.20*	6.239E+00	1.324E-01	1.324E-01	23.84

Flag: "*" = Keyline

Sample ID : G198701015 Acquisition date : 13-DEC-2007 10:59:29

Total number of lines in spectrum	68	
Number of unidentified lines	30	
Number of lines tentatively identified by NID	38	55.88%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.205E+00	3.205E+00	0.567E+00	17.68	
RH-101	1.04E+08S	1.05	7.857E-03	8.211E-03	23.89E-03	290.95	
CS-137	9.47E+08S	1.00	1.008E-01	1.013E-01	0.339E-01	33.52	
TL-208	4.43E+17S	1.00	1.656E-01	1.656E-01	0.365E-01	22.05	
BI-212	4.43E+17S	1.00	3.318E-01	3.318E-01	2.519E-01	75.94	
PB-212	4.43E+17S	1.00	5.531E-01	5.531E-01	0.611E-01	11.04	
BI-214	5.05E+10S	1.00	4.823E-01	4.823E-01	0.748E-01	15.51	
PB-214	5.05E+10S	1.00	5.265E-01	5.266E-01	0.803E-01	15.25	
RA-223	1.04E+12S	1.00	2.353E-01	2.353E-01	1.331E-01	56.58	
AC-228	4.43E+17S	1.00	5.536E-01	5.536E-01	1.458E-01	26.34	
TH-234	1.41E+17S	1.00	7.391E-01	7.391E-01	3.936E-01	53.26	
U-235	2.22E+16S	1.00	4.293E-03	4.293E-03	141.3E-03	3292.02	
NP-237	6.75E+13S	1.00	3.259E-01	3.259E-01	1.302E-01	39.96	
AM-243	2.33E+11S	1.00	1.324E-01	1.324E-01	0.316E-01	23.84	
			---	---			
		Total Activity :	7.364E+00	7.365E+00			
		Grand Total Activity :	7.364E+00	7.365E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701015 Acquisition date : 13-DEC-2007 10:59:29

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	45.95	10	403	0.99	91.88	88	10	6.88E-04	****	1.72E+00	
10	84.20	72	407	2.04	168.29	164	27	5.00E-03	****	7.01E+00	
10	90.08	92	252	0.86	180.03	164	27	6.38E-03	55.8	7.34E+00	
2	127.36	43	237	1.45	254.50	251	10	2.96E-03	****	7.67E+00	
0	176.85	39	245	1.75	353.36	351	7	2.74E-03	****	6.72E+00	
0	185.81	119	411	1.16	371.27	365	12	8.28E-03	78.4	6.54E+00	
0	218.50	34	241	0.96	436.57	433	8	2.35E-03	****	5.92E+00	
0	328.74	79	240	3.80	656.85	651	13	5.46E-03	84.8	4.47E+00	
0	454.12	42	90	1.09	907.42	902	11	2.92E-03	92.9	3.51E+00	
3	465.88	26	95	1.61	930.94	917	22	1.83E-03	****	3.44E+00	
0	531.35	17	59	1.76	1061.79	1058	8	1.18E-03	****	3.10E+00	
0	596.38	29	32	1.27	1191.79	1189	8	2.01E-03	77.1	2.82E+00	
1	603.89	26	53	1.70	1206.82	1204	23	1.83E-03	88.7	2.79E+00	
0	693.08	44	56	2.07	1385.13	1380	11	3.08E-03	71.4	2.48E+00	
0	836.93	27	61	2.02	1672.80	1666	15	1.89E-03	****	2.10E+00	
0	880.39	9	27	1.26	1759.73	1757	8	6.08E-04	****	2.00E+00	
0	926.67	13	25	1.65	1852.31	1848	8	9.17E-04	****	1.91E+00	
0	1095.67	28	26	0.59	2190.40	2183	16	1.93E-03	92.6	1.64E+00	
0	1162.53	29	12	3.68	2324.18	2319	12	1.99E-03	61.3	1.56E+00	
0	1199.94	11	21	0.78	2399.06	2392	9	7.70E-04	****	1.51E+00	
0	1271.76	14	12	1.39	2542.79	2538	11	1.00E-03	****	1.44E+00	
0	1322.70	14	15	1.55	2644.75	2639	10	9.72E-04	****	1.39E+00	
0	1437.75	12	12	1.56	2875.06	2867	10	8.28E-04	****	1.30E+00	
0	1469.95	13	4	1.14	2939.52	2935	8	9.11E-04	76.2	1.28E+00	
0	1522.56	20	6	1.72	3044.85	3041	9	1.37E-03	65.1	1.25E+00	
0	1526.68	8	3	1.03	3053.11	3049	7	5.37E-04	****	1.25E+00	
0	1572.76	8	11	0.75	3145.38	3134	15	5.61E-04	****	1.22E+00	
0	1579.19	25	17	5.08	3158.25	3149	17	1.75E-03	84.6	1.22E+00	
0	1678.13	8	1	0.60	3356.40	3353	6	5.25E-04	88.8	1.17E+00	
0	1776.24	9	7	4.29	3552.91	3545	13	6.51E-04	****	1.13E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701015            *
* Acquisition date : 13-DEC-2007 10:59:29 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:01.27     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701015           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1848E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.205E+00	5.552E-01	1.061E-01	5.552E-01
RH-101	8.211E-03	2.341E-02	1.387E-02	2.341E-02
CS-137	1.013E-01	3.327E-02	1.388E-02	3.327E-02
TL-208	1.656E-01	3.578E-02	1.406E-02	3.578E-02
BI-212	3.318E-01	2.469E-01	1.012E-01	2.469E-01
PB-212	5.531E-01	5.984E-02	2.294E-02	5.984E-02
BI-214	4.823E-01	7.331E-02	2.655E-02	7.331E-02
PB-214	5.266E-01	7.868E-02	2.821E-02	7.868E-02
RA-223	2.353E-01	1.305E-01	7.538E-02	1.305E-01
AC-228	5.536E-01	1.429E-01	5.143E-02	1.429E-01
TH-234	7.391E-01	3.858E-01	1.750E-01	3.858E-01
U-235	4.293E-03	1.385E-01	8.111E-02	1.385E-01
NP-237	3.259E-01	1.276E-01	7.919E-02	1.276E-01
AM-243	1.324E-01	3.094E-02	1.695E-02	3.094E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	4.117E-03	1.823E-02	1.540E-02	1.823E-02	NOT IDENT.
SB-125	2.185E-02	4.582E-02	3.933E-02	4.582E-02	NOT IDENT.
EU-155	4.029E-02	4.607E-02	4.215E-02	4.607E-02	NOT IDENT.
PO-209	1.468E+00	3.219E+00	2.824E+00	3.219E+00	NOT IDENT.
BI-211	-6.715E-02	5.231E-01	3.755E-01	5.231E-01	NOT IDENT.
PA-233	1.782E-02	3.091E-02	2.700E-02	3.091E-02	NOT IDENT.
PA-234M	-4.904E-01	2.415E+00	1.868E+00	2.415E+00	NOT IDENT.
NP-236	-2.490E-02	3.062E-02	2.214E-02	3.062E-02	NOT IDENT.
NP-239	8.357E-02	1.078E-01	9.582E-02	1.078E-01	NOT IDENT.
AM-241	1.549E-02	5.851E-02	4.468E-02	5.851E-02	NOT IDENT.
CM-243	-8.738E-03	4.005E-02	3.534E-02	4.005E-02	NOT IDENT.
AM-246	4.138E-02	6.453E-02	5.697E-02	6.453E-02	NOT IDENT.
CF-249	1.144E-02	2.048E-02	1.769E-02	2.048E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	286.2739
63.29	332.8251
74.66	357.3513
74.81	357.4231
74.81	357.4231
77.11	358.5146
77.11	358.5146
86.48	343.3441
87.30	343.6890
87.30	343.6890
92.58	345.8679
98.44	312.0004
103.76	281.9797
105.31	274.5627
129.07	299.0863
143.76	304.2776
198.00	263.4385
209.25	243.6993
228.18	217.7212
238.63	219.2217
242.00	219.6968
269.46	201.5161
270.25	201.2093
277.36	203.4615
295.22	173.3578
300.09	177.0798
312.17	147.1838
338.32	169.9533
351.93	146.0861
387.59	134.8270
409.46	121.8180
427.87	105.9523
463.00	102.0607
510.77	80.5408
583.19	84.5609
609.31	83.4763
661.66	67.0080
727.33	58.7602
763.13	68.1492
768.36	75.0769
785.37	48.0107
794.95	46.1761
806.17	62.0910
831.80	52.9375
860.56	63.3534
896.60	41.4034
911.20	48.6551
934.06	40.7813
964.77	53.0794
968.97	56.5616
1001.03	44.5653
1078.86	39.0451
1120.29	41.5365
1155.19	40.2429
1173.23	35.5507
1238.11	40.4019
1280.96	22.9451
1332.51	24.1052
1377.67	22.4424
1401.50	15.9679
1407.98	26.3320
1460.80	15.6668
1509.23	22.9854
1588.20	24.4638
1620.50	18.5454
1729.60	10.2183
1764.49	20.5488

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701015

Total Uranium Activity	1.9863E-03	ug/g
Total Uranium Counting Unc.	6.4081E-02	ug/g
Total Uranium Tpu	6.4081E-08	ug/g
Total Uranium Mda	3.7529E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:59:06.36

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701016.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 11:15:35
Sample ID         : G198701016           Sample quantity  : 1.15720E+02 GRAM
Detector name     : GAM16                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00         Elapsed real time: 0 04:00:01.46  0.0%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708130               Detector SN#     :
Matrix Spike ID  :                       LCS ID           :
*****************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.08*	26	450	1.06	126.37	123	8	1.80E-03	157.4	
2	3	74.78*	367	522	1.53	149.77	144	15	2.55E-02	13.2	2.28E+00
3	3	77.18*	502	391	1.13	154.57	144	15	3.49E-02	8.8	
4	2	84.32*	125	442	1.54	168.85	164	28	8.69E-03	33.0	8.79E-01
5	2	87.30*	217	387	1.25	174.81	164	28	1.51E-02	17.8	
6	2	89.90	141	431	1.55	180.01	164	28	9.81E-03	29.1	
7	2	92.77*	254	425	1.46	185.74	164	28	1.77E-02	18.1	
8	0	105.45	56	321	1.54	211.11	207	8	3.86E-03	57.4	
9	0	164.61	59	389	3.55	329.43	323	12	4.12E-03	67.7	
10	0	186.35*	181	374	1.34	372.91	368	12	1.26E-02	24.8	
11	3	238.72*	1060	191	1.16	477.66	469	21	7.36E-02	4.1	9.33E-01
12	3	241.65	310	297	1.94	483.52	469	21	2.16E-02	15.3	
13	0	269.99	186	266	1.86	540.20	532	15	1.29E-02	20.5	
14	0	277.72	60	116	1.48	555.65	553	6	4.14E-03	31.7	
15	0	295.52*	312	174	1.55	591.26	587	10	2.17E-02	10.4	
16	0	300.36	108	159	0.92	600.94	597	10	7.48E-03	24.0	
17	0	327.92	39	183	1.05	656.08	653	9	2.70E-03	64.7	
18	0	338.41	198	147	1.33	677.04	673	9	1.37E-02	13.2	
19	0	352.06*	475	187	1.23	704.36	699	11	3.30E-02	7.9	
20	0	463.46	54	92	1.16	927.18	924	8	3.74E-03	34.1	
21	0	511.23*	116	214	2.34	1022.75	1014	20	8.03E-03	38.8	
22	0	573.24	8	73	1.12	1146.80	1141	8	5.82E-04	183.8	
23	0	583.46*	353	157	1.77	1167.24	1160	16	2.45E-02	10.0	
24	0	609.52*	370	123	1.78	1219.37	1214	12	2.57E-02	8.4	
25	0	662.25	35	97	0.67	1324.85	1317	14	2.43E-03	62.2	
26	0	727.08*	72	85	1.16	1454.56	1449	12	4.98E-03	30.1	
27	0	795.54	33	48	1.55	1591.52	1587	10	2.31E-03	42.5	
28	0	860.48	56	58	1.32	1721.47	1716	12	3.92E-03	29.9	
29	0	911.18*	188	74	1.23	1822.91	1816	14	1.31E-02	13.1	
30	1	964.90*	26	25	2.01	1930.39	1927	23	1.77E-03	50.5	1.57E+00
31	1	969.28	111	40	2.01	1939.16	1927	23	7.74E-03	15.4	
32	0	1108.61	20	30	1.68	2217.95	2212	10	1.39E-03	55.9	
33	0	1120.97*	88	70	1.93	2242.68	2236	18	6.12E-03	25.8	
34	0	1238.79*	38	47	0.75	2478.46	2473	14	2.63E-03	47.1	
35	0	1271.93	6	38	3.80	2544.78	2533	13	3.98E-04	228.2	
36	0	1288.10	14	29	7.80	2577.15	2565	17	9.72E-04	93.0	
37	1	1384.61	20	21	2.33	2770.30	2746	43	1.39E-03	54.0	1.63E+00
38	1	1391.24	24	15	2.33	2783.58	2746	43	1.70E-03	33.1	

Sample ID : G198701016 Acquisition date : 13-DEC-2007 11:15:35

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1407.95	28	54	9.74	2817.02	2800	24	1.94E-03	75.1	
40	0	1432.67	21	11	3.22	2866.49	2860	14	1.49E-03	38.8	
41	0	1460.92*	531	34	2.73	2923.03	2914	21	3.68E-02	5.4	
42	0	1517.28	12	5	1.59	3035.83	3032	8	8.50E-04	44.0	
43	0	1543.43	17	6	1.89	3088.18	3082	12	1.18E-03	37.7	
44	0	1581.73	7	20	1.31	3164.85	3156	13	4.51E-04	145.4	
45	0	1589.35	40	23	1.39	3180.10	3172	15	2.74E-03	30.6	
46	0	1703.37	13	5	0.80	3408.32	3403	9	8.68E-04	41.7	
47	0	1764.93*	56	21	1.29	3531.56	3522	17	3.87E-03	24.7	
48	0	1771.14	6	4	0.60	3543.98	3539	8	4.44E-04	66.3	
49	0	1841.21	30	6	9.74	3684.26	3672	22	2.11E-03	26.8	
50	0	1850.15	11	11	2.34	3702.17	3696	12	7.86E-04	67.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701016       *
* Acquisition date : 13-DEC-2007 11:15:35 Detector SN#    :                 *
* Detector ID      : GAM16                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.46     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701016           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1572E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  1-OCT-2007 14:23:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	6.165E+00	7.437E-01	2.951E-01	0.000E+00
CS-137	2.565E-02	3.136E-02	3.190E-02	0.000E+00
EU-155	5.606E-02	6.320E-02	8.539E-02	0.000E+00
TL-208	2.329E-01	4.850E-02	3.021E-02	0.000E+00
BI-212	4.085E-01	2.436E-01	2.318E-01	0.000E+00
PB-212	6.870E-01	6.645E-02	4.836E-02	0.000E+00
BI-214	4.638E-01	8.399E-02	6.333E-02	0.000E+00
PB-214	4.703E-01	7.677E-02	5.904E-02	0.000E+00
RA-223	4.148E-01	1.682E-01	1.466E-01	0.000E+00
AC-228	5.992E-01	1.616E-01	1.140E-01	0.000E+00
TH-234	1.022E+00	3.705E-01	3.833E-01	0.000E+00
NP-237	3.958E-01	1.414E-01	1.744E-01	0.000E+00
AM-243	1.428E-01	3.810E-02	3.971E-02	0.000E+00
CM-243	5.044E-02	5.687E-02	8.084E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	2.032E-02		1.957E-02	3.603E-02	0.000E+00	NOT IDENT.
RH-101	-6.252E-03		1.914E-02	2.970E-02	0.000E+00	NOT IDENT.
SB-125	5.745E-02		4.741E-02	8.632E-02	0.000E+00	NOT IDENT.
PO-209	1.512E+00		3.647E+00	6.420E+00	0.000E+00	NOT IDENT.
BI-211	-1.154E-01		5.544E-01	9.331E-01	0.000E+00	NOT IDENT.
PA-233	1.927E-02		3.212E-02	5.722E-02	0.000E+00	NOT IDENT.
PA-234M	7.583E-02		2.639E+00	3.987E+00	0.000E+00	NOT IDENT.
U-235	1.197E-03		1.114E-01	1.795E-01	0.000E+00	NOT IDENT.
NP-236	3.189E-02		3.369E-02	5.151E-02	0.000E+00	NOT IDENT.
NP-239	7.004E-03		1.143E-01	1.909E-01	0.000E+00	NOT IDENT.
AM-241	3.253E-02		6.545E-02	1.038E-01	0.000E+00	NOT IDENT.
AM-246	-4.279E-02		7.150E-02	1.132E-01	0.000E+00	NOT IDENT.
CF-249	1.086E-02		1.962E-02	3.464E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:59:07.26

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701016.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 11:15:35
Sample ID        : G198701016           Sample quantity  : 1.15720E+02 GRAM
Detector name    : GAM16                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.46  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           :
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	531	10.66*	1.309E+00	6.166E+00	6.165E+00	12.31
CS-137	661.66	35	85.10*	2.615E+00	2.553E-02	2.565E-02	124.72
EU-155	105.31	56	21.20*	7.820E+00	5.445E-02	5.606E-02	115.04
TL-208	277.36	60	6.31	5.196E+00	2.951E-01	2.951E-01	63.68
	510.77	116	22.60	3.249E+00	2.553E-01	2.553E-01	77.93
	583.19	353	84.50*	2.912E+00	2.329E-01	2.329E-01	21.25
	763.13	------	1.81	2.311E+00	------	Line Not Found	------
	860.56	56	12.42	2.077E+00	3.550E-01	3.550E-01	60.40
BI-212	727.33	72	11.80*	2.411E+00	4.085E-01	4.085E-01	60.84
	785.37	------	1.10	2.253E+00	------	Line Not Found	------
	1620.50	------	1.49	1.212E+00	------	Line Not Found	------
PB-212	74.81	367	10.40	6.120E+00	9.362E-01	9.362E-01	27.23
	77.11	502	17.50	6.369E+00	7.311E-01	7.311E-01	18.76
	87.30	217	7.81	7.169E+00	6.285E-01	6.285E-01	36.45
	238.63	1060	43.30*	5.777E+00	6.870E-01	6.870E-01	9.87
	300.09	108	3.28	4.909E+00	1.086E+00	1.086E+00	48.24
BI-214	609.31	370	46.10*	2.807E+00	4.637E-01	4.638E-01	18.48
	768.36	------	4.94	2.297E+00	------	Line Not Found	------
	806.17	------	1.22	2.201E+00	------	Line Not Found	------
	934.06	------	3.03	1.929E+00	------	Line Not Found	------
	1120.29	88	15.10	1.638E+00	5.776E-01	5.777E-01	51.94
	1155.19	------	1.63	1.595E+00	------	Line Not Found	------
	1238.11	38	5.79	1.501E+00	7.072E-01	7.072E-01	94.39
	1280.96	------	1.43	1.458E+00	------	Line Not Found	------
	1377.67	------	4.00	1.372E+00	------	Line Not Found	------
	1401.50	------	1.27	1.353E+00	------	Line Not Found	------
	1407.98	28	2.15	1.348E+00	1.567E+00	1.567E+00	150.29
	1509.23	------	2.11	1.277E+00	------	Line Not Found	------
	1729.60	------	2.92	1.161E+00	------	Line Not Found	------
	1764.49	56	15.40	1.146E+00	5.125E-01	5.125E-01	49.80
PB-214	74.81	367	6.44	6.120E+00	1.512E+00	1.512E+00	27.23
	77.11	502	10.80	6.369E+00	1.185E+00	1.185E+00	18.76

Sample ID : G198701016 Acquisition date : 13-DEC-2007 11:15:35

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	217	4.84	7.169E+00	1.014E+00	1.014E+00	36.45
	242.00	310	7.43	5.729E+00	1.183E+00	1.183E+00	31.11
	295.22	312	19.30	4.967E+00	5.281E-01	5.281E-01	21.45
	351.93	475	37.60*	4.359E+00	4.703E-01	4.703E-01	16.66
RA-223	269.46	186	13.70*	5.302E+00	4.148E-01	4.148E-01	41.38
AC-228	129.07	------	2.42	7.821E+00	------	Line Not Found	------
	209.25	------	3.89	6.298E+00	------	Line Not Found	------
	270.25	186	3.46	5.302E+00	1.642E+00	1.642E+00	41.38
	338.32	198	11.27	4.491E+00	6.330E-01	6.330E-01	26.91
	409.46	------	1.92	3.879E+00	------	Line Not Found	------
	463.00	54	4.40	3.517E+00	5.645E-01	5.645E-01	68.51
	794.95	33	4.25	2.227E+00	5.703E-01	5.703E-01	85.36
	911.20	188	25.80*	1.973E+00	5.992E-01	5.992E-01	27.53
	964.77	26	4.99	1.874E+00	4.424E-01	4.424E-01	101.33
	968.97	111	15.80	1.866E+00	6.132E-01	6.132E-01	31.70
	1588.20	40	3.22	1.229E+00	1.619E+00	1.619E+00	61.55
TH-234	63.29	26	4.80	4.561E+00	1.919E-01	1.919E-01	314.79
	92.58	254	5.41*	7.455E+00	1.022E+00	1.022E+00	36.98
NP-237	86.48	217	12.40*	7.169E+00	3.958E-01	3.958E-01	36.45
AM-243	74.66	367	68.20*	6.120E+00	1.428E-01	1.428E-01	27.23
CM-243	103.76	56	23.00*	7.820E+00	5.018E-02	5.044E-02	115.04

Flag: "*" = Keyline

Sample ID : G198701016 Acquisition date : 13-DEC-2007 11:15:35

Total number of lines in spectrum 50
Number of unidentified lines 19
Number of lines tentatively identified by NID 31 62.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	6.166E+00	6.165E+00	0.759E+00	12.31	
CS-137	9.47E+08S	1.00	2.553E-02	2.565E-02	3.200E-02	124.72	
EU-155	1.57E+08S	1.03	5.445E-02	5.606E-02	6.449E-02	115.04	
TL-208	4.43E+17S	1.00	2.329E-01	2.329E-01	0.495E-01	21.25	
BI-212	4.43E+17S	1.00	4.085E-01	4.085E-01	2.486E-01	60.84	
PB-212	4.43E+17S	1.00	6.870E-01	6.870E-01	0.678E-01	9.87	
BI-214	5.05E+10S	1.00	4.637E-01	4.638E-01	0.857E-01	18.48	
PB-214	5.05E+10S	1.00	4.703E-01	4.703E-01	0.783E-01	16.66	
RA-223	1.04E+12S	1.00	4.148E-01	4.148E-01	1.716E-01	41.38	
AC-228	4.43E+17S	1.00	5.992E-01	5.992E-01	1.649E-01	27.53	
TH-234	1.41E+17S	1.00	1.022E+00	1.022E+00	0.378E+00	36.98	
NP-237	6.75E+13S	1.00	3.958E-01	3.958E-01	1.443E-01	36.45	
AM-243	2.33E+11S	1.00	1.428E-01	1.428E-01	0.389E-01	27.23	
CM-243	8.99E+08S	1.01	5.018E-02	5.044E-02	5.803E-02	115.04	
			---	---			
	Total Activity :		1.113E+01	1.114E+01			

Grand Total Activity : 1.113E+01 1.114E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701016 Acquisition date : 13-DEC-2007 11:15:35

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	84.32	125	442	1.54	168.85	164	28	8.69E-03	66.0	6.97E+00	
2	89.90	141	431	1.55	180.01	164	28	9.81E-03	58.3	7.32E+00	
0	164.61	59	389	3.55	329.43	323	12	4.12E-03	****	7.20E+00	
0	186.35	181	374	1.34	372.91	368	12	1.26E-02	49.5	6.75E+00	
0	327.92	39	183	1.05	656.08	653	9	2.70E-03	****	4.60E+00	
0	573.24	8	73	1.12	1146.80	1141	8	5.82E-04	****	2.96E+00	
0	1108.61	20	30	1.68	2217.95	2212	10	1.39E-03	****	1.65E+00	
0	1271.93	6	38	3.80	2544.78	2533	13	3.98E-04	****	1.47E+00	
0	1288.10	14	29	7.80	2577.15	2565	17	9.72E-04	****	1.45E+00	
1	1384.61	20	21	2.33	2770.30	2746	43	1.39E-03	****	1.37E+00	
1	1391.24	24	15	2.33	2783.58	2746	43	1.70E-03	66.2	1.36E+00	
0	1432.67	21	11	3.22	2866.49	2860	14	1.49E-03	77.5	1.33E+00	
0	1517.28	12	5	1.59	3035.83	3032	8	8.50E-04	88.0	1.27E+00	
0	1543.43	17	6	1.89	3088.18	3082	12	1.18E-03	75.3	1.26E+00	
0	1581.73	7	20	1.31	3164.85	3156	13	4.51E-04	****	1.23E+00	
0	1703.37	13	5	0.80	3408.32	3403	9	8.68E-04	83.3	1.17E+00	
0	1771.14	6	4	0.60	3543.98	3539	8	4.44E-04	****	1.14E+00	
0	1841.21	30	6	9.74	3684.26	3672	22	2.11E-03	53.6	1.12E+00	
0	1850.15	11	11	2.34	3702.17	3696	12	7.86E-04	****	1.12E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701016            *
* Acquisition date : 13-DEC-2007 11:15:35 Detector SN#    :                 *
* Detector ID      : GAM16                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.46     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701016           Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.1572E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  1-OCT-2007 14:23:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	6.165E+00	7.437E-01	1.476E-01	7.437E-01
CS-137	2.565E-02	3.136E-02	1.596E-02	3.136E-02
EU-155	5.606E-02	6.320E-02	4.272E-02	6.320E-02
TL-208	2.329E-01	4.850E-02	1.512E-02	4.850E-02
BI-212	4.085E-01	2.436E-01	1.160E-01	2.436E-01
PB-212	6.870E-01	6.645E-02	2.419E-02	6.645E-02
BI-214	4.638E-01	8.399E-02	3.168E-02	8.399E-02
PB-214	4.703E-01	7.677E-02	2.954E-02	7.677E-02
RA-223	4.148E-01	1.682E-01	7.333E-02	1.682E-01
AC-228	5.992E-01	1.616E-01	5.703E-02	1.616E-01
TH-234	1.022E+00	3.705E-01	1.918E-01	3.705E-01
NP-237	3.958E-01	1.414E-01	8.725E-02	1.414E-01
AM-243	1.428E-01	3.810E-02	1.986E-02	3.810E-02
CM-243	5.044E-02	5.687E-02	4.045E-02	5.687E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.032E-02	1.957E-02	1.802E-02	1.957E-02	NOT IDENT.
RH-101	-6.252E-03	1.914E-02	1.486E-02	1.914E-02	NOT IDENT.
SB-125	5.745E-02	4.741E-02	4.319E-02	4.741E-02	NOT IDENT.
PO-209	1.512E+00	3.647E+00	3.212E+00	3.647E+00	NOT IDENT.
BI-211	-1.154E-01	5.544E-01	4.668E-01	5.544E-01	NOT IDENT.
PA-233	1.927E-02	3.212E-02	2.863E-02	3.212E-02	NOT IDENT.
PA-234M	7.583E-02	2.639E+00	1.995E+00	2.639E+00	NOT IDENT.
U-235	1.197E-03	1.114E-01	8.978E-02	1.114E-01	NOT IDENT.
NP-236	3.189E-02	3.369E-02	2.577E-02	3.369E-02	NOT IDENT.
NP-239	7.004E-03	1.143E-01	9.553E-02	1.143E-01	NOT IDENT.
AM-241	3.253E-02	6.545E-02	5.193E-02	6.545E-02	NOT IDENT.
AM-246	-4.279E-02	7.150E-02	5.664E-02	7.150E-02	NOT IDENT.
CF-249	1.086E-02	1.962E-02	1.733E-02	1.962E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	338.3844
63.29	428.2333
74.66	457.0586
74.81	457.1528
74.81	457.1528
77.11	458.5892
77.11	458.5892
86.48	397.0922
87.30	397.5012
87.30	397.5012
92.58	400.0944
98.44	300.5106
103.76	349.3467
105.31	317.7844
129.07	337.8611
143.76	354.8526
198.00	282.6260
209.25	294.6558
228.18	252.8314
238.63	250.2256
242.00	250.7840
269.46	194.7491
270.25	194.8446
277.36	222.3531
295.22	206.0863
300.09	150.4376
312.17	168.9040
338.32	175.0291
351.93	161.2668
387.59	129.7844
409.46	137.8732
427.87	106.9479
463.00	117.4805
510.77	106.7123
583.19	96.2173
609.31	116.9547
661.66	87.1590
727.33	75.9746
763.13	100.9395
768.36	75.8208
785.37	61.6593
794.95	71.0596
806.17	69.4366
831.80	81.1306
860.56	67.6772
896.60	55.0464
911.20	59.0685
934.06	45.0426
964.77	74.5077
968.97	62.8444
1001.03	52.6234
1078.86	62.5334
1120.29	51.5311
1155.19	44.4279
1173.23	34.4662
1238.11	58.1390
1280.96	26.6602
1332.51	29.3296
1377.67	36.9838
1401.50	43.6708
1407.98	28.6941
1460.80	30.0496
1509.23	25.9834
1588.20	21.9539
1620.50	14.1912
1729.60	13.4849
1764.49	10.1700

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701016

Total Uranium Activity	5.5368E-04	ug/g
Total Uranium Counting Unc.	5.1525E-02	ug/g
Total Uranium Tpu	5.1525E-08	ug/g
Total Uranium Mda	4.1542E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:59:40.96

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473840.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 13-DEC-2007 12:52:26
Sample ID        : G1201473840          Sample quantity  : 1.27910E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:24.42  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	186.08*	16	134	1.34	370.87	366	9	1.10E-03	160.0	
2	0	192.11	83	151	6.56	382.94	375	16	5.78E-03	35.2	
3	0	239.49*	7	169	3.40	477.58	471	13	5.15E-04	403.5	
4	0	267.47	30	73	1.63	533.47	530	9	2.06E-03	55.0	
5	0	352.20*	33	106	2.43	702.76	695	17	2.30E-03	80.2	
6	0	431.29	20	55	4.48	860.80	852	12	1.39E-03	71.0	
7	0	527.54	30	53	7.25	1053.17	1045	18	2.05E-03	61.1	
8	0	610.92*	35	60	9.41	1219.83	1209	22	2.43E-03	66.5	
9	0	698.81	100	61	14.57	1395.55	1371	40	6.93E-03	27.6	
10	0	709.16	19	32	0.81	1416.24	1412	10	1.33E-03	60.2	
11	0	971.51	8	16	0.57	1940.90	1934	8	5.61E-04	92.6	
12	0	978.11	22	2	1.21	1954.10	1949	11	1.50E-03	26.0	
13	0	1024.70	6	14	1.27	2047.31	2040	9	3.99E-04	129.5	
14	0	1039.98	39	21	11.04	2077.87	2066	27	2.72E-03	35.8	
15	0	1052.94	24	14	4.71	2103.81	2093	19	1.66E-03	43.1	
16	0	1162.24	13	20	6.11	2322.49	2312	16	9.08E-04	81.3	
17	0	1166.13	10	3	0.68	2330.28	2327	7	7.05E-04	43.1	
18	0	1194.37	14	6	0.54	2386.79	2380	12	9.72E-04	44.0	
19	0	1318.02	7	18	2.95	2634.25	2623	15	4.58E-04	147.9	
20	0	1363.91	4	13	0.78	2726.11	2718	10	3.02E-04	159.6	
21	0	1368.15	7	7	0.92	2734.60	2729	9	4.96E-04	81.9	
22	0	1499.87	7	8	0.78	2998.31	2989	12	4.72E-04	95.3	
23	0	1553.40	21	0	5.37	3105.48	3100	14	1.46E-03	21.8	
24	0	1591.55	16	4	1.34	3181.89	3177	10	1.09E-03	36.3	
25	0	1660.92	14	7	2.66	3320.81	3314	13	9.37E-04	47.5	
26	0	1678.58	12	0	2.96	3356.17	3351	11	8.33E-04	28.9	
27	0	1713.83	3	4	1.00	3426.78	3420	8	2.28E-04	117.9	
28	0	1913.04	9	3	1.32	3825.86	3819	12	6.37E-04	50.0	
29	0	1987.46	8	4	0.69	3975.00	3969	10	5.32E-04	64.6	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473840      *
* Acquisition date : 13-DEC-2007 12:52:26 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:24.42     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473840          Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2791E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
RA-223	7.499E-02	8.096E-02	1.232E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
K-40	-1.514E-01	2.882E-01	4.045E-01	0.000E+00	NOT IDENT.
CO-60	1.167E-02	2.064E-02	3.611E-02	0.000E+00	NOT IDENT.
RH-101	-3.295E-03	1.497E-02	2.003E-02	0.000E+00	NOT IDENT.
SB-125	-2.985E-03	4.848E-02	7.066E-02	0.000E+00	NOT IDENT.
CS-137	-6.439E-04	1.809E-02	3.124E-02	0.000E+00	NOT IDENT.
EU-155	-3.051E-02	2.810E-02	4.453E-02	0.000E+00	NOT IDENT.
TL-208	-5.707E-03	2.080E-02	3.271E-02	0.000E+00	NOT IDENT.
PO-209	1.370E+00	3.986E+00	7.059E+00	0.000E+00	NOT IDENT.
BI-211	1.774E-01	5.365E-01	9.520E-01	0.000E+00	NOT IDENT.
BI-212	1.353E-01	1.345E-01	2.559E-01	0.000E+00	NOT IDENT.
PB-212	5.361E-03	4.240E-02	4.647E-02	0.000E+00	FAIL ABUN
BI-214	6.232E-02	8.136E-02	6.883E-02	0.000E+00	FAIL ABUN
PB-214	4.042E-02	6.357E-02	6.269E-02	0.000E+00	FAIL ABUN
AC-228	-4.585E-03	7.131E-02	1.202E-01	0.000E+00	NOT IDENT.
PA-233	-2.208E-04	2.770E-02	4.782E-02	0.000E+00	NOT IDENT.
PA-234M	-2.283E+00	2.422E+00	3.552E+00	0.000E+00	NOT IDENT.
TH-234	-1.301E-01	1.249E-01	1.824E-01	0.000E+00	NOT IDENT.
U-235	-2.076E-02	6.486E-02	1.074E-01	0.000E+00	NOT IDENT.
NP-236	-1.511E-02	1.523E-02	2.439E-02	0.000E+00	NOT IDENT.
NP-237	-2.576E-02	4.457E-02	7.397E-02	0.000E+00	NOT IDENT.
NP-239	-1.258E-03	8.657E-02	1.517E-01	0.000E+00	NOT IDENT.
AM-241	-1.323E-02	1.400E-02	2.278E-02	0.000E+00	NOT IDENT.
AM-243	-3.370E-03	8.135E-03	1.374E-02	0.000E+00	NOT IDENT.
CM-243	-7.899E-04	2.512E-02	4.295E-02	0.000E+00	NOT IDENT.
AM-246	2.893E-02	6.565E-02	1.177E-01	0.000E+00	NOT IDENT.
CF-249	1.587E-03	1.715E-02	2.952E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:59:41.72

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473840.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 13-DEC-2007 12:52:26
Sample ID        : G1201473840          Sample quantity  : 1.27910E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:24.42  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
RA-223	269.46	30	13.70*	4.226E+00	7.499E-02	7.499E-02	110.16

Flag: "*" = Keyline

Sample ID : G1201473840 Acquisition date : 13-DEC-2007 12:52:26

Total number of lines in spectrum 29
Number of unidentified lines 25
Number of lines tentatively identified by NID 4 13.79%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RA-223	1.04E+12S	1.00	7.499E-02	7.499E-02	8.261E-02	110.16	
		Total Activity :	7.499E-02	7.499E-02			
		Grand Total Activity :	7.499E-02	7.499E-02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473840 Acquisition date : 13-DEC-2007 12:52:26

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	186.08	16	134	1.34	370.87	366	9	1.10E-03	****	5.83E+00	
0	192.11	83	151	6.56	382.94	375	16	5.78E-03	70.4	5.69E+00	
0	239.49	7	169	3.40	477.58	471	13	5.15E-04	****	4.69E+00	T
0	352.20	33	106	2.43	702.76	695	17	2.30E-03	****	3.20E+00	T
0	431.29	20	55	4.48	860.80	852	12	1.39E-03	****	2.59E+00	
0	527.54	30	53	7.25	1053.17	1045	18	2.05E-03	****	2.09E+00	
0	610.92	35	60	9.41	1219.83	1209	22	2.43E-03	****	1.79E+00	T
0	698.81	100	61	14.57	1395.55	1371	40	6.93E-03	55.3	1.55E+00	
0	709.16	19	32	0.81	1416.24	1412	10	1.33E-03	****	1.53E+00	
0	971.51	8	16	0.57	1940.90	1934	8	5.61E-04	****	1.11E+00	
0	978.11	22	2	1.21	1954.10	1949	11	1.50E-03	52.1	1.10E+00	
0	1024.70	6	14	1.27	2047.31	2040	9	3.99E-04	****	1.05E+00	
0	1039.98	39	21	11.04	2077.87	2066	27	2.72E-03	71.7	1.04E+00	
0	1052.94	24	14	4.71	2103.81	2093	19	1.66E-03	86.2	1.02E+00	
0	1162.24	13	20	6.11	2322.49	2312	16	9.08E-04	****	9.28E-01	
0	1166.13	10	3	0.68	2330.28	2327	7	7.05E-04	86.1	9.25E-01	
0	1194.37	14	6	0.54	2386.79	2380	12	9.72E-04	88.1	9.04E-01	
0	1318.02	7	18	2.95	2634.25	2623	15	4.58E-04	****	8.21E-01	
0	1363.91	4	13	0.78	2726.11	2718	10	3.02E-04	****	7.94E-01	
0	1368.15	7	7	0.92	2734.60	2729	9	4.96E-04	****	7.92E-01	
0	1499.87	7	8	0.78	2998.31	2989	12	4.72E-04	****	7.25E-01	
0	1553.40	21	0	5.37	3105.48	3100	14	1.46E-03	43.6	7.00E-01	
0	1591.55	16	4	1.34	3181.89	3177	10	1.09E-03	72.6	6.84E-01	
0	1660.92	14	7	2.66	3320.81	3314	13	9.37E-04	95.0	6.56E-01	
0	1678.58	12	0	2.96	3356.17	3351	11	8.33E-04	57.7	6.50E-01	
0	1713.83	3	4	1.00	3426.78	3420	8	2.28E-04	****	6.36E-01	
0	1913.04	9	3	1.32	3825.86	3819	12	6.37E-04	****	5.71E-01	
0	1987.46	8	4	0.69	3975.00	3969	10	5.32E-04	****	5.49E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473840          *
* Acquisition date : 13-DEC-2007 12:52:26 Detector SN#    :                *
* Detector ID      : GAM21                Sensitivity     : 3.000          *
* Geometry         : CAN                  Energy tolerance: 2.000          *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 04:00:24.42     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473840          Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.2791E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
RA-223	7.499E-02	8.096E-02	6.163E-02	8.096E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
K-40	-1.514E-01	2.882E-01	2.024E-01	2.882E-01	NOT IDENT.
CO-60	1.167E-02	2.064E-02	1.807E-02	2.064E-02	NOT IDENT.
RH-101	-3.295E-03	1.497E-02	1.002E-02	1.497E-02	NOT IDENT.
SB-125	-2.985E-03	4.848E-02	3.535E-02	4.848E-02	NOT IDENT.
CS-137	-6.439E-04	1.809E-02	1.563E-02	1.809E-02	NOT IDENT.
EU-155	-3.051E-02	2.810E-02	2.228E-02	2.810E-02	NOT IDENT.
TL-208	-5.707E-03	2.080E-02	1.636E-02	2.080E-02	NOT IDENT.
PO-209	1.370E+00	3.986E+00	3.531E+00	3.986E+00	NOT IDENT.
BI-211	1.774E-01	5.365E-01	4.763E-01	5.365E-01	NOT IDENT.
BI-212	1.353E-01	1.345E-01	1.280E-01	1.345E-01	NOT IDENT.
PB-212	5.361E-03	4.240E-02	2.325E-02	4.240E-02	FAIL ABUN
BI-214	6.232E-02	8.136E-02	3.443E-02	8.136E-02	FAIL ABUN
PB-214	4.042E-02	6.357E-02	3.136E-02	6.357E-02	FAIL ABUN
AC-228	-4.585E-03	7.131E-02	6.013E-02	7.131E-02	NOT IDENT.
PA-233	-2.208E-04	2.770E-02	2.393E-02	2.770E-02	NOT IDENT.
PA-234M	-2.283E+00	2.422E+00	1.777E+00	2.422E+00	NOT IDENT.
TH-234	-1.301E-01	1.249E-01	9.124E-02	1.249E-01	NOT IDENT.
U-235	-2.076E-02	6.486E-02	5.374E-02	6.486E-02	NOT IDENT.
NP-236	-1.511E-02	1.523E-02	1.220E-02	1.523E-02	NOT IDENT.
NP-237	-2.576E-02	4.457E-02	3.701E-02	4.457E-02	NOT IDENT.
NP-239	-1.258E-03	8.657E-02	7.587E-02	8.657E-02	NOT IDENT.
AM-241	-1.323E-02	1.400E-02	1.140E-02	1.400E-02	NOT IDENT.
AM-243	-3.370E-03	8.135E-03	6.874E-03	8.135E-03	NOT IDENT.
CM-243	-7.899E-04	2.512E-02	2.149E-02	2.512E-02	NOT IDENT.
AM-246	2.893E-02	6.565E-02	5.886E-02	6.565E-02	NOT IDENT.
CF-249	1.587E-03	1.715E-02	1.477E-02	1.715E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	119.3414
63.29	88.8782
74.66	142.3677
74.81	142.3906
74.81	142.3906
77.11	121.7490
77.11	121.7490
86.48	139.8754
87.30	142.1097
87.30	142.1097
92.58	142.8366
98.44	150.0504
103.76	130.3105
105.31	152.0576
129.07	157.2769
143.76	146.7970
198.00	129.0984
209.25	143.8830
228.18	130.4177
238.63	117.0053
242.00	103.9810
269.46	102.2591
270.25	103.8966
277.36	102.0146
295.22	99.0042
300.09	100.2012
312.17	91.9518
338.32	91.0353
351.93	72.6516
387.59	63.6106
409.46	64.1489
427.87	63.2234
463.00	57.1028
510.77	63.3065
583.19	44.2502
609.31	48.9419
661.66	40.4721
727.33	26.2084
763.13	34.0034
768.36	36.8854
785.37	35.1399
794.95	33.3181
806.17	32.4540
831.80	29.7708
860.56	32.8704
896.60	28.2654
911.20	29.3347
934.06	19.6541
964.77	28.8280
968.97	23.7617
1001.03	35.8813
1078.86	17.2103
1120.29	17.3486
1155.19	15.8486
1173.23	16.0780
1238.11	22.9417
1280.96	14.7092
1332.51	13.7786
1377.67	12.8145
1401.50	17.1523
1407.98	19.3169
1460.80	16.2329
1509.23	14.9537
1588.20	14.8964
1620.50	12.3534
1729.60	14.4768
1764.49	19.3952

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473840

Total Uranium Activity	-9.6042E-03	ug/g
Total Uranium Counting Unc.	3.0012E-02	ug/g
Total Uranium Tpu	3.0012E-08	ug/g
Total Uranium Mda	2.4866E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:00:16.05

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473841.CNF;1
Sample date      : 18-OCT-2007 00:00:00 Acquisition date : 13-DEC-2007 12:53:05
Sample ID        : G1201473841          Sample quantity  : 1.03260E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.04  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	2	74.89	178	273	0.98	149.73	145	16	1.24E-02	16.3	7.78E-01
2	2	77.09*	251	220	0.90	154.13	145	16	1.74E-02	12.0	
3	0	87.14	141	310	1.11	174.24	172	7	9.81E-03	22.2	
4	0	92.88*	108	429	1.32	185.73	182	10	7.48E-03	42.0	
5	0	108.16	47	215	1.37	216.28	214	6	3.28E-03	51.2	
6	9	143.61*	55	98	1.37	287.19	285	11	3.83E-03	42.0	3.08E+00
7	9	145.75*	0	215	1.39	291.48	285	11	1.66E-05	*****	
8	0	154.08	48	189	1.16	308.14	305	6	3.36E-03	47.2	
9	0	185.88*	117	319	1.11	371.73	367	10	8.15E-03	33.3	
10	0	209.21	45	209	0.92	418.41	415	7	3.13E-03	55.4	
11	2	238.67*	620	176	0.97	477.34	473	21	4.31E-02	5.6	1.18E+00
12	2	242.10	104	197	1.35	484.21	473	21	7.22E-03	26.8	
13	0	251.94	48	205	3.03	503.88	500	9	3.30E-03	56.2	
14	0	270.22	67	199	1.34	540.46	536	9	4.68E-03	39.6	
15	0	295.37*	153	150	1.05	590.76	587	8	1.06E-02	18.5	
16	0	300.56	34	144	0.83	601.14	598	8	2.34E-03	65.3	
17	0	338.39	96	193	1.03	676.81	672	9	6.65E-03	28.1	
18	0	351.93*	308	167	1.05	703.90	698	10	2.14E-02	10.3	
19	0	462.71	45	105	0.94	925.51	920	10	3.16E-03	44.6	
20	0	510.84*	51	185	2.28	1021.80	1014	18	3.55E-03	80.2	
21	0	583.26*	174	58	2.02	1166.68	1162	9	1.21E-02	12.8	
22	0	609.50*	203	120	1.60	1219.18	1212	13	1.41E-02	14.1	
23	0	627.35	19	109	3.41	1254.90	1243	13	1.32E-03	116.0	
24	4	661.47*	117	49	1.79	1323.16	1319	19	8.10E-03	15.4	1.75E+00
25	4	666.09	31	47	2.30	1332.42	1319	19	2.16E-03	47.4	
26	0	728.60	23	80	0.73	1457.47	1449	12	1.61E-03	80.2	
27	0	803.51*	9	80	2.79	1607.35	1600	12	6.08E-04	223.9	
28	0	840.78	28	33	1.53	1681.93	1678	7	1.91E-03	39.7	
29	0	910.91*	136	36	1.29	1822.25	1816	13	9.45E-03	13.5	
30	0	934.83	19	44	0.97	1870.10	1864	12	1.34E-03	73.1	
31	0	965.56	26	40	2.44	1931.59	1926	10	1.78E-03	51.3	
32	0	969.31	59	20	1.40	1939.09	1935	9	4.10E-03	18.9	
33	0	1063.60*	28	54	1.74	2127.77	2118	20	1.95E-03	108.6	
34	0	1121.89	72	40	3.85	2244.41	2237	17	4.99E-03	24.5	
35	0	1154.16	12	21	1.05	2309.00	2303	10	8.27E-04	79.3	
36	1	1166.16	16	22	1.94	2333.00	2327	22	1.14E-03	67.1	3.69E+00
37	1	1168.66	23	27	1.95	2338.00	2327	22	1.61E-03	49.6	
38	0	1176.12	21	19	3.80	2352.92	2348	11	1.47E-03	45.6	

Sample ID : G1201473841 Acquisition date : 13-DEC-2007 12:53:05

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1230.14	7	25	2.59	2461.03	2453	11	5.12E-04	140.7	
40	0	1339.86	7	24	3.65	2680.61	2671	15	4.93E-04	151.4	
41	0	1351.16	22	14	3.81	2703.21	2694	15	1.52E-03	44.0	
42	0	1376.93	37	8	1.66	2754.78	2747	16	2.57E-03	23.7	
43	0	1395.81	16	10	4.39	2792.58	2786	13	1.12E-03	47.3	
44	0	1437.13	10	9	0.70	2875.27	2867	12	7.27E-04	64.8	
45	0	1460.64*	262	22	2.29	2922.33	2914	15	1.82E-02	7.6	
46	0	1546.45	16	35	3.00	3094.06	3078	29	1.08E-03	114.2	
47	0	1590.03	28	13	3.37	3181.28	3173	19	1.92E-03	37.8	
48	0	1614.84	6	9	1.27	3230.94	3226	11	4.28E-04	99.6	
49	1	1764.53	25	21	2.52	3530.54	3525	21	1.72E-03	39.0	1.01E+00
50	1	1769.98*	9	15	2.53	3541.46	3525	21	6.46E-04	119.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473841      *
* Acquisition date : 13-DEC-2007 12:53:05 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:08.04     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 18-OCT-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473841          Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0326E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.302E+00	7.105E-01	3.692E-01	0.000E+00
CS-137	1.188E-01	3.659E-02	4.046E-02	0.000E+00
TL-208	1.600E-01	4.097E-02	3.437E-02	0.000E+00
BI-212	1.849E-01	2.909E-01	3.353E-01	0.000E+00
PB-212	5.464E-01	6.754E-02	5.807E-02	0.000E+00
BI-214	3.556E-01	1.006E-01	7.891E-02	0.000E+00
PB-214	4.219E-01	8.777E-02	7.456E-02	0.000E+00
RA-223	2.059E-01	1.603E-01	1.809E-01	0.000E+00
AC-228	6.071E-01	1.680E-01	1.292E-01	0.000E+00
U-235	1.430E-01	1.181E-01	1.719E-01	0.000E+00
NP-237	3.858E-01	1.703E-01	2.122E-01	0.000E+00
AM-243	1.143E-01	3.745E-02	4.327E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	0.000E+00		2.036E-02	4.710E-02	0.000E+00	NOT IDENT.
RH-101	2.066E-02		2.322E-02	3.502E-02	0.000E+00	NOT IDENT.
SB-125	-7.017E-03		6.073E-02	1.006E-01	0.000E+00	NOT IDENT.
EU-155	3.897E-02		6.208E-02	1.003E-01	0.000E+00	NOT IDENT.
PO-209	-3.195E-01		5.044E+00	8.250E+00	0.000E+00	NOT IDENT.
BI-211	4.841E-01		7.442E-01	1.299E+00	0.000E+00	NOT IDENT.
PA-233	3.193E-02		3.892E-02	6.961E-02	0.000E+00	NOT IDENT.
PA-234M	-2.259E+00		3.463E+00	4.812E+00	0.000E+00	NOT IDENT.
TH-234	0.000E+00		5.184E-01	6.071E-01	0.000E+00	FAIL ABUN
NP-236	-1.597E-02		3.294E-02	5.360E-02	0.000E+00	NOT IDENT.
NP-239	-7.723E-03		1.285E-01	2.098E-01	0.000E+00	NOT IDENT.
AM-241	2.953E-02		9.392E-02	1.554E-01	0.000E+00	NOT IDENT.
CM-243	8.844E-04		5.086E-02	8.842E-02	0.000E+00	NOT IDENT.
AM-246	-2.172E-02		8.374E-02	1.377E-01	0.000E+00	NOT IDENT.
CF-249	3.129E-03		2.644E-02	4.484E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:00:16.98

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473841.CNF;1
Sample date      : 18-OCT-2007 00:00:00 Acquisition date : 13-DEC-2007 12:53:05
Sample ID        : G1201473841          Sample quantity  : 1.03260E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.04  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	262	10.66*	1.037E+00	4.302E+00	4.302E+00	16.85
CS-137	661.66	117	85.10*	2.102E+00	1.184E-01	1.188E-01	31.41
TL-208	277.36	------	6.31	4.253E+00	------	Line Not Found	------
	510.77	51	22.60	2.614E+00	1.571E-01	1.571E-01	160.45
	583.19	174	84.50*	2.341E+00	1.600E-01	1.600E-01	26.14
	763.13	------	1.81	1.854E+00	------	Line Not Found	------
	860.56	------	12.42	1.664E+00	------	Line Not Found	------
BI-212	727.33	23	11.80*	1.932E+00	1.849E-01	1.849E-01	160.56
	785.37	------	1.10	1.807E+00	------	Line Not Found	------
	1620.50	------	1.49	9.597E-01	------	Line Not Found	------
PB-212	74.81	178	10.40	4.157E+00	7.497E-01	7.497E-01	33.43
	77.11	251	17.50	4.410E+00	5.912E-01	5.912E-01	25.05
	87.30	141	7.81	5.365E+00	6.126E-01	6.126E-01	45.04
	238.63	620	43.30*	4.766E+00	5.464E-01	5.464E-01	12.61
	300.09	34	3.28	3.996E+00	4.664E-01	4.664E-01	130.68
BI-214	609.31	203	46.10*	2.255E+00	3.556E-01	3.556E-01	28.85
	768.36	------	4.94	1.843E+00	------	Line Not Found	------
	806.17	------	1.22	1.765E+00	------	Line Not Found	------
	934.06	19	3.03	1.542E+00	7.482E-01	7.483E-01	146.50
	1120.29	72	15.10	1.304E+00	6.631E-01	6.631E-01	49.47
	1155.19	12	1.63	1.271E+00	1.045E+00	1.045E+00	158.76
	1238.11	------	5.79	1.193E+00	------	Line Not Found	------
	1280.96	------	1.43	1.158E+00	------	Line Not Found	------
	1377.67	37	4.00	1.089E+00	1.545E+00	1.545E+00	47.98
	1401.50	------	1.27	1.073E+00	------	Line Not Found	------
	1407.98	------	2.15	1.069E+00	------	Line Not Found	------
	1509.23	------	2.11	1.011E+00	------	Line Not Found	------
	1729.60	------	2.92	9.196E-01	------	Line Not Found	------
	1764.49	25	15.40	9.087E-01	3.226E-01	3.226E-01	78.29
PB-214	74.81	178	6.44	4.157E+00	1.211E+00	1.211E+00	33.43
	77.11	251	10.80	4.410E+00	9.580E-01	9.581E-01	25.05
	87.30	141	4.84	5.365E+00	9.885E-01	9.886E-01	45.04

Sample ID : G1201473841 Acquisition date : 13-DEC-2007 12:53:05

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	104	7.43	4.716E+00	5.394E-01	5.394E-01	53.92
	295.22	153	19.30	4.051E+00	3.551E-01	3.551E-01	37.55
	351.93	308	37.60*	3.529E+00	4.219E-01	4.219E-01	21.23
RA-223	269.46	67	13.70*	4.340E+00	2.059E-01	2.059E-01	79.43
AC-228	129.07	------	2.42	6.529E+00	------	Line Not Found	------
	209.25	45	3.89	5.237E+00	4.024E-01	4.024E-01	110.94
	270.25	67	3.46	4.340E+00	8.152E-01	8.152E-01	79.43
	338.32	96	11.27	3.640E+00	4.242E-01	4.242E-01	56.49
	409.46	------	1.92	3.128E+00	------	Line Not Found	------
	463.00	45	4.40	2.834E+00	6.631E-01	6.631E-01	89.44
	794.95	------	4.25	1.788E+00	------	Line Not Found	------
	911.20	136	25.80*	1.580E+00	6.071E-01	6.071E-01	28.24
	964.77	26	4.99	1.497E+00	6.224E-01	6.224E-01	102.89
	968.97	59	15.80	1.492E+00	4.549E-01	4.549E-01	38.60
	1588.20	28	3.22	9.726E-01	1.601E+00	1.601E+00	75.90
U-235	143.76	55	10.96*	6.392E+00	1.430E-01	1.430E-01	84.30
NP-237	86.48	141	12.40*	5.365E+00	3.858E-01	3.858E-01	45.04
AM-243	74.66	178	68.20*	4.157E+00	1.143E-01	1.143E-01	33.43

Flag: "*" = Keyline

Sample ID : G1201473841 Acquisition date : 13-DEC-2007 12:53:05

Total number of lines in spectrum 50
Number of unidentified lines 21
Number of lines tentatively identified by NID 29 58.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.302E+00	4.302E+00	0.725E+00	16.85	
CS-137	9.47E+08S	1.00	1.184E-01	1.188E-01	0.373E-01	31.41	
TL-208	4.43E+17S	1.00	1.600E-01	1.600E-01	0.418E-01	26.14	
BI-212	4.43E+17S	1.00	1.849E-01	1.849E-01	2.968E-01	160.56	
PB-212	4.43E+17S	1.00	5.464E-01	5.464E-01	0.689E-01	12.61	
BI-214	5.05E+10S	1.00	3.556E-01	3.556E-01	1.026E-01	28.85	
PB-214	5.05E+10S	1.00	4.219E-01	4.219E-01	0.896E-01	21.23	
RA-223	1.04E+12S	1.00	2.059E-01	2.059E-01	1.636E-01	79.43	
AC-228	4.43E+17S	1.00	6.071E-01	6.071E-01	1.714E-01	28.24	
U-235	2.22E+16S	1.00	1.430E-01	1.430E-01	1.205E-01	84.30	
NP-237	6.75E+13S	1.00	3.858E-01	3.858E-01	1.738E-01	45.04	
AM-243	2.33E+11S	1.00	1.143E-01	1.143E-01	0.382E-01	33.43	
			---	---			
		Total Activity :	7.545E+00	7.546E+00			
		Grand Total Activity :	7.545E+00	7.546E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473841 Acquisition date : 13-DEC-2007 12:53:05

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	92.88	108	429	1.32	185.73	182	10	7.48E-03	83.9	5.76E+00	T
0	108.16	47	215	1.37	216.28	214	6	3.28E-03	****	6.38E+00	
0	154.08	48	189	1.16	308.14	305	6	3.36E-03	94.3	6.23E+00	
0	185.88	117	319	1.11	371.73	367	10	8.15E-03	66.6	5.66E+00	
0	251.94	48	205	3.03	503.88	500	9	3.30E-03	****	4.58E+00	
0	627.35	19	109	3.41	1254.90	1243	13	1.32E-03	****	2.20E+00	
4	666.09	31	47	2.30	1332.42	1319	19	2.16E-03	94.8	2.09E+00	
0	803.51	9	80	2.79	1607.35	1600	12	6.08E-04	****	1.77E+00	
0	840.78	28	33	1.53	1681.93	1678	7	1.91E-03	79.3	1.70E+00	
0	1063.60	28	54	1.74	2127.77	2118	20	1.95E-03	****	1.37E+00	
1	1166.16	16	22	1.94	2333.00	2327	22	1.14E-03	****	1.26E+00	
1	1168.66	23	27	1.95	2338.00	2327	22	1.61E-03	99.2	1.26E+00	
0	1176.12	21	19	3.80	2352.92	2348	11	1.47E-03	91.2	1.25E+00	
0	1230.14	7	25	2.59	2461.03	2453	11	5.12E-04	****	1.20E+00	
0	1339.86	7	24	3.65	2680.61	2671	15	4.93E-04	****	1.11E+00	
0	1351.16	22	14	3.81	2703.21	2694	15	1.52E-03	88.0	1.11E+00	
0	1395.81	16	10	4.39	2792.58	2786	13	1.12E-03	94.6	1.08E+00	
0	1437.13	10	9	0.70	2875.27	2867	12	7.27E-04	****	1.05E+00	
0	1546.45	16	35	3.00	3094.06	3078	29	1.08E-03	****	9.93E-01	
0	1614.84	6	9	1.27	3230.94	3226	11	4.28E-04	****	9.62E-01	
1	1769.98	9	15	2.53	3541.46	3525	21	6.46E-04	****	9.07E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473841          *
* Acquisition date : 13-DEC-2007 12:53:05 Detector SN#    :                *
* Detector ID      : GAM23                Sensitivity     : 3.000          *
* Geometry         : CAN                  Energy tolerance: 2.000          *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 04:00:08.04     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 18-OCT-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473841          Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.0326E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.302E+00	7.105E-01	1.847E-01	7.105E-01
CS-137	1.188E-01	3.659E-02	2.024E-02	3.659E-02
TL-208	1.600E-01	4.097E-02	1.719E-02	4.097E-02
BI-212	1.849E-01	2.909E-01	1.678E-01	2.909E-01
PB-212	5.464E-01	6.754E-02	2.905E-02	6.754E-02
BI-214	3.556E-01	1.006E-01	3.948E-02	1.006E-01
PB-214	4.219E-01	8.777E-02	3.730E-02	8.777E-02
RA-223	2.059E-01	1.603E-01	9.049E-02	1.603E-01
AC-228	6.071E-01	1.680E-01	6.465E-02	1.680E-01
U-235	1.430E-01	1.181E-01	8.598E-02	1.181E-01
NP-237	3.858E-01	1.703E-01	1.062E-01	1.703E-01
AM-243	1.143E-01	3.745E-02	2.165E-02	3.745E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	7.021E-02	2.036E-02	2.356E-02	2.036E-02	NOT IDENT.
RH-101	2.066E-02	2.322E-02	1.752E-02	2.322E-02	NOT IDENT.
SB-125	-7.017E-03	6.073E-02	5.034E-02	6.073E-02	NOT IDENT.
EU-155	3.897E-02	6.208E-02	5.018E-02	6.208E-02	NOT IDENT.
PO-209	-3.195E-01	5.044E+00	4.127E+00	5.044E+00	NOT IDENT.
BI-211	4.841E-01	7.442E-01	6.500E-01	7.442E-01	NOT IDENT.
PA-233	3.193E-02	3.892E-02	3.483E-02	3.892E-02	NOT IDENT.
PA-234M	-2.259E+00	3.463E+00	2.408E+00	3.463E+00	NOT IDENT.
TH-234	6.279E-01	5.184E-01	3.037E-01	5.184E-01	FAIL ABUN
NP-236	-1.597E-02	3.294E-02	2.682E-02	3.294E-02	NOT IDENT.
NP-239	-7.723E-03	1.285E-01	1.050E-01	1.285E-01	NOT IDENT.
AM-241	2.953E-02	9.392E-02	7.777E-02	9.392E-02	NOT IDENT.
CM-243	8.844E-04	5.086E-02	4.423E-02	5.086E-02	NOT IDENT.
AM-246	-2.172E-02	8.374E-02	6.888E-02	8.374E-02	NOT IDENT.
CF-249	3.129E-03	2.644E-02	2.243E-02	2.644E-02	NOT IDENT.

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                 2040 SAVAGE ROAD                          *
*                              CHARLESTON ,SC 29417                         *
*                        GAMMA SPECTROSCOPY BACKGROUND REPORT               *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	178.3147
63.29	187.7915
74.66	206.0734
74.81	206.1720
74.81	206.1720
77.11	207.6713
77.11	207.6713
86.48	271.3464
87.30	277.0175
87.30	277.0175
92.58	251.2965
98.44	231.5299
103.76	222.7577
105.31	211.2903
129.07	186.7972
143.76	202.0044
198.00	193.2183
209.25	197.5185
228.18	175.3906
238.63	201.1688
242.00	202.0452
269.46	162.7903
270.25	161.7867
277.36	151.4736
295.22	163.0218
300.09	155.3483
312.17	126.1808
338.32	163.1012
351.93	137.4831
387.59	127.7578
409.46	122.2061
427.87	109.9364
463.00	92.8621
510.77	101.8964
583.19	65.2128
609.31	95.0346
661.66	73.4411
727.33	82.8625
763.13	89.3167
768.36	90.5379
785.37	65.2000
794.95	59.3389
806.17	70.9058
831.80	61.4941
860.56	61.2500
896.60	55.8816
911.20	39.2520
934.06	48.1915
964.77	70.4764
968.97	47.0626
1001.03	43.9883
1078.86	42.4493
1120.29	41.0243
1155.19	39.8571
1173.23	0.0000
1238.11	31.8542
1280.96	27.2406
1332.51	19.3244
1377.67	19.5822
1401.50	25.0938
1407.98	27.2357
1460.80	23.6904
1509.23	22.6176
1588.20	16.4911
1620.50	21.6138
1729.60	16.5832
1764.49	20.6528

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473841

Total Uranium Activity	6.6162E-02	ug/g
Total Uranium Counting Unc.	5.4658E-02	ug/g
Total Uranium Tpu	5.4658E-08	ug/g
Total Uranium Mda	3.9784E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:01:12.45

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473842.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 14-DEC-2007 04:50:43
Sample ID        : G1201473842          Sample quantity  : 1.55440E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:02.39  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	49.06	140	1156	1.84	98.90	96	7	3.90E-02	40.9	
2	0	59.33	8211	1649	1.13	119.42	114	11	2.28E+00	1.5	
3	0	76.15*	596	1320	1.00	153.05	147	11	1.66E-01	12.5	
4	0	87.94*	6609	1255	1.15	176.61	171	13	1.84E+00	1.7	
5	0	92.86*	77	501	1.19	186.45	183	8	2.14E-02	52.4	
6	0	105.55	54	331	1.07	211.82	209	7	1.49E-02	58.0	
7	0	121.95*	2060	541	1.14	244.60	238	12	5.72E-01	3.2	
8	0	136.53	279	417	1.15	273.73	269	11	7.75E-02	15.4	
9	0	165.74	835	539	1.10	332.11	325	14	2.32E-01	6.8	
10	0	187.64	173	936	3.88	375.89	360	28	4.81E-02	50.6	
11	2	238.69*	496	237	1.37	477.91	470	25	1.38E-01	7.0	1.38E+00
12	2	241.80	128	276	1.75	484.12	470	25	3.56E-02	27.9	
13	0	270.11	68	219	1.30	540.71	537	9	1.88E-02	41.0	
14	0	295.44*	102	207	1.49	591.32	587	9	2.84E-02	27.5	
15	0	327.92	31	222	1.64	656.24	652	10	8.55E-03	92.4	
16	0	338.36*	154	245	1.24	677.10	671	13	4.29E-02	22.5	
17	0	351.78*	255	200	1.39	703.92	697	12	7.07E-02	12.9	
18	0	391.87	385	251	1.37	784.04	779	13	1.07E-01	9.9	
19	0	504.36	25	93	1.65	1008.80	1007	7	6.83E-03	67.7	
20	0	510.73*	27	290	2.48	1021.54	1015	17	7.54E-03	148.9	
21	8	561.06	16	34	1.21	1122.09	1120	11	4.33E-03	53.0	1.31E+00
22	8	563.60	28	84	1.35	1127.17	1120	11	7.75E-03	60.6	
23	0	583.51	131	149	1.44	1166.96	1160	13	3.63E-02	21.2	
24	0	609.46*	194	152	1.76	1218.81	1211	18	5.38E-02	16.7	
25	0	661.84	2016	208	1.50	1323.44	1315	17	5.60E-01	2.8	
26	0	728.00	26	119	0.88	1455.62	1451	9	7.35E-03	76.9	
27	0	835.59	43	89	3.69	1670.55	1664	12	1.21E-02	46.1	
28	0	852.28	24	77	1.15	1703.88	1698	9	6.75E-03	69.2	
29	0	880.84	18	99	0.80	1760.93	1755	9	4.95E-03	104.9	
30	0	898.45	370	127	1.69	1796.10	1790	11	1.03E-01	7.9	
31	0	911.68*	83	167	1.18	1822.52	1817	12	2.30E-02	33.3	
32	0	938.37	30	289	6.54	1875.85	1864	21	8.37E-03	142.2	
33	0	1028.77	27	108	5.31	2056.39	2047	14	7.45E-03	84.6	
34	0	1173.74	2136	92	1.93	2345.91	2338	15	5.93E-01	2.4	
35	0	1333.11	1821	38	1.99	2664.14	2653	20	5.06E-01	2.5	
36	0	1344.61	8	7	0.88	2687.10	2681	8	2.09E-03	73.9	
37	0	1461.64*	28	12	2.94	2920.77	2915	12	7.70E-03	32.2	
38	0	1491.92	9	11	3.25	2981.22	2973	11	2.50E-03	78.8	

Sample ID : G1201473842 Acquisition date : 14-DEC-2007 04:50:43

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1510.35	20	19	2.30	3018.01	3007	15	5.55E-03	52.3	
40	0	1613.22	22	11	7.18	3223.37	3214	21	6.05E-03	43.1	
41	0	1640.53	15	9	1.11	3277.89	3272	11	4.24E-03	48.3	
42	0	1701.51	5	9	4.36	3399.62	3388	13	1.27E-03	147.9	
43	0	1720.90	6	3	1.41	3438.30	3434	8	1.64E-03	70.0	
44	0	1729.66	21	4	3.99	3455.79	3447	16	5.83E-03	30.5	
45	0	1753.15	8	5	1.51	3502.69	3498	8	2.20E-03	63.1	
46	0	1764.88*	39	4	2.09	3526.09	3518	16	1.08E-02	20.6	
47	0	1837.14	275	0	2.34	3670.31	3661	18	7.64E-02	6.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473842      *
* Acquisition date : 14-DEC-2007 04:50:43 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 01:00:02.39     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473842          Analyst initials: MJH1            *
* Batch Number     : 708130               Sample Quantity : 1.5544E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	1.287E+00	8.182E-01	1.013E+00	0.000E+00
CO-60	8.869E+00	6.321E-01	1.785E-01	0.000E+00
CS-137	6.064E+00	5.861E-01	1.687E-01	0.000E+00
EU-155	1.781E-01	2.032E-01	3.533E-01	0.000E+00
TL-208	3.550E-01	1.493E-01	1.522E-01	0.000E+00
PO-209	2.612E+02	4.679E+01	4.524E+01	0.000E+00
BI-212	6.227E-01	9.396E-01	1.309E+00	0.000E+00
PB-212	1.239E+00	1.985E-01	2.093E-01	0.000E+00
PB-214	9.987E-01	2.589E-01	2.843E-01	0.000E+00
RA-223	5.883E-01	4.743E-01	6.268E-01	0.000E+00
NP-237	3.586E+01	3.308E+00	8.723E-01	0.000E+00
AM-241	1.496E+01	1.185E+00	3.146E-01	0.000E+00
AM-243	5.770E-01	1.492E-01	1.501E-01	0.000E+00
CM-243	1.637E-01	1.868E-01	3.142E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
RH-101	2.597E-02	6.871E-02	1.215E-01	0.000E+00	NOT IDENT.
SB-125	-1.103E-01	2.442E-01	4.149E-01	0.000E+00	NOT IDENT.
BI-211	1.481E+00	3.397E+00	5.177E+00	0.000E+00	NOT IDENT.
BI-214	0.000E+00	3.363E-01	4.103E-01	0.000E+00	FAIL ABUN
AC-228	0.000E+00	7.099E-01	1.009E+00	0.000E+00	FAIL ABUN
PA-233	4.286E-02	1.443E-01	2.608E-01	0.000E+00	NOT IDENT.
PA-234M	-2.139E+00	1.442E+01	2.398E+01	0.000E+00	NOT IDENT.
TH-234	9.686E-01	9.991E-01	1.556E+00	0.000E+00	FAIL ABUN
U-235	-9.008E-02	3.690E-01	6.523E-01	0.000E+00	NOT IDENT.
NP-236	-5.303E-02	1.070E-01	1.861E-01	0.000E+00	NOT IDENT.
NP-239	-1.720E-01	5.072E-01	8.639E-01	0.000E+00	NOT IDENT.
AM-246	-2.309E-02	4.452E-01	7.686E-01	0.000E+00	NOT IDENT.
CF-249	-2.175E-02	1.130E-01	1.691E-01	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:01:13.37

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473842.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 14-DEC-2007 04:50:43
Sample ID        : G1201473842          Sample quantity  : 1.55440E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:02.39  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708130               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	28	10.66*	9.764E-01	1.287E+00	1.287E+00	64.87
CO-60	1173.23	2136	100.00*	1.167E+00	8.840E+00	8.869E+00	7.27
	1332.51	1821	100.00	1.053E+00	8.358E+00	8.386E+00	9.73
CS-137	661.66	2016	85.10*	1.888E+00	6.061E+00	6.064E+00	9.86
EU-155	105.31	54	21.20*	6.879E+00	1.775E-01	1.781E-01	116.42
TL-208	277.36	------	6.31	3.981E+00	------	Line Not Found	------
	510.77	27	22.60	2.368E+00	2.451E-01	2.451E-01	297.95
	583.19	131	84.50*	2.107E+00	3.550E-01	3.550E-01	42.91
	763.13	------	1.81	1.670E+00	------	Line Not Found	------
	860.56	------	12.42	1.508E+00	------	Line Not Found	------
PO-209	896.60	370	0.47*	1.455E+00	2.611E+02	2.612E+02	18.28
BI-212	727.33	26	11.80*	1.738E+00	6.227E-01	6.227E-01	153.97
	785.37	------	1.10	1.629E+00	------	Line Not Found	------
	1620.50	------	1.49	8.967E-01	------	Line Not Found	------
PB-212	74.81	596	10.40	7.319E+00	3.784E+00	3.784E+00	26.39
	77.11	596	17.50	7.319E+00	2.249E+00	2.249E+00	26.39
	87.30	6609	7.81	7.178E+00	5.694E+01	5.694E+01	9.41
	238.63	496	43.30*	4.466E+00	1.239E+00	1.239E+00	16.35
	300.09	------	3.28	3.738E+00	------	Line Not Found	------
PB-214	74.81	596	6.44	7.319E+00	6.111E+00	6.111E+00	26.39
	77.11	596	10.80	7.319E+00	3.644E+00	3.644E+00	26.39
	87.30	6609	4.84	7.178E+00	9.188E+01	9.188E+01	9.41
	242.00	128	7.43	4.423E+00	1.881E+00	1.881E+00	56.40
	295.22	102	19.30	3.785E+00	6.758E-01	6.758E-01	55.34
	351.93	255	37.60*	3.275E+00	9.986E-01	9.987E-01	26.46
RA-223	269.46	68	13.70*	4.065E+00	5.883E-01	5.883E-01	82.26
NP-237	86.48	6609	12.40*	7.178E+00	3.586E+01	3.586E+01	9.41
AM-241	59.54	8211	35.90*	7.383E+00	1.496E+01	1.496E+01	8.08
AM-243	74.66	596	68.20*	7.319E+00	5.770E-01	5.770E-01	26.39
CM-243	103.76	54	23.00*	6.879E+00	1.636E-01	1.637E-01	116.42

Flag: "*" = Keyline

Sample ID : G1201473842 Acquisition date : 14-DEC-2007 04:50:43

Total number of lines in spectrum 47
Number of unidentified lines 23
Number of lines tentatively identified by NID 24 51.06%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	1.287E+00	1.287E+00	0.835E+00	64.87	
CO-60	1.66E+08S	1.00	8.840E+00	8.869E+00	0.645E+00	7.27	
CS-137	9.47E+08S	1.00	6.061E+00	6.064E+00	0.598E+00	9.86	
EU-155	1.57E+08S	1.00	1.775E-01	1.781E-01	2.074E-01	116.42	
TL-208	4.43E+17S	1.00	3.550E-01	3.550E-01	1.523E-01	42.91	
PO-209	3.22E+09S	1.00	2.611E+02	2.612E+02	0.477E+02	18.28	
BI-212	4.43E+17S	1.00	6.227E-01	6.227E-01	9.588E-01	153.97	
PB-212	4.43E+17S	1.00	1.239E+00	1.239E+00	0.203E+00	16.35	
PB-214	5.05E+10S	1.00	9.986E-01	9.987E-01	2.642E-01	26.46	
RA-223	1.04E+12S	1.00	5.883E-01	5.883E-01	4.840E-01	82.26	
NP-237	6.75E+13S	1.00	3.586E+01	3.586E+01	0.338E+01	9.41	
AM-241	1.36E+10S	1.00	1.496E+01	1.496E+01	0.121E+01	8.08	
AM-243	2.33E+11S	1.00	5.770E-01	5.770E-01	1.523E-01	26.39	
CM-243	8.99E+08S	1.00	1.636E-01	1.637E-01	1.906E-01	116.42	
			---	---			
	Total Activity :		3.329E+02	3.330E+02			

Grand Total Activity : 3.329E+02 3.330E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473842 Acquisition date : 14-DEC-2007 04:50:43

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	49.06	140	1156	1.84	98.90	96	7	3.90E-02	81.8	7.32E+00	
0	92.86	77	501	1.19	186.45	183	8	2.14E-02	****	7.10E+00	T
0	121.95	2060	541	1.14	244.60	238	12	5.72E-01	6.3	6.56E+00	
0	136.53	279	417	1.15	273.73	269	11	7.75E-02	30.8	6.26E+00	
0	165.74	835	539	1.10	332.11	325	14	2.32E-01	13.7	5.67E+00	
0	187.64	173	936	3.88	375.89	360	28	4.81E-02	****	5.27E+00	
0	327.92	31	222	1.64	656.24	652	10	8.55E-03	****	3.47E+00	
0	338.36	154	245	1.24	677.10	671	13	4.29E-02	45.0	3.38E+00	T
0	391.87	385	251	1.37	784.04	779	13	1.07E-01	19.8	2.99E+00	
0	504.36	25	93	1.65	1008.80	1007	7	6.83E-03	****	2.39E+00	
8	561.06	16	34	1.21	1122.09	1120	11	4.33E-03	****	2.18E+00	
8	563.60	28	84	1.35	1127.17	1120	11	7.75E-03	****	2.17E+00	
0	609.46	194	152	1.76	1218.81	1211	18	5.38E-02	33.5	2.03E+00	T
0	835.59	43	89	3.69	1670.55	1664	12	1.21E-02	92.3	1.55E+00	
0	852.28	24	77	1.15	1703.88	1698	9	6.75E-03	****	1.52E+00	
0	880.84	18	99	0.80	1760.93	1755	9	4.95E-03	****	1.48E+00	
0	911.68	83	167	1.18	1822.52	1817	12	2.30E-02	66.7	1.44E+00	T
0	938.37	30	289	6.54	1875.85	1864	21	8.37E-03	****	1.40E+00	
0	1028.77	27	108	5.31	2056.39	2047	14	7.45E-03	****	1.30E+00	
0	1344.61	8	7	0.88	2687.10	2681	8	2.09E-03	****	1.05E+00	
0	1491.92	9	11	3.25	2981.22	2973	11	2.50E-03	****	9.60E-01	
0	1510.35	20	19	2.30	3018.01	3007	15	5.55E-03	****	9.50E-01	T
0	1613.22	22	11	7.18	3223.37	3214	21	6.05E-03	86.2	9.00E-01	
0	1640.53	15	9	1.11	3277.89	3272	11	4.24E-03	96.6	8.88E-01	
0	1701.51	5	9	4.36	3399.62	3388	13	1.27E-03	****	8.61E-01	
0	1720.90	6	3	1.41	3438.30	3434	8	1.64E-03	****	8.53E-01	
0	1729.66	21	4	3.99	3455.79	3447	16	5.83E-03	61.0	8.49E-01	T
0	1753.15	8	5	1.51	3502.69	3498	8	2.20E-03	****	8.39E-01	
0	1764.88	39	4	2.09	3526.09	3518	16	1.08E-02	41.2	8.34E-01	T
0	1837.14	275	0	2.34	3670.31	3661	18	7.64E-02	12.1	8.06E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473842          *
* Acquisition date : 14-DEC-2007 04:50:43 Detector SN#    :                *
* Detector ID      : GAM05                Sensitivity     : 3.000          *
* Geometry         : CAN                  Energy tolerance: 2.000          *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 01:00:02.39     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473842          Analyst initials: MJH1           *
* Batch Number     : 708130               Sample Quantity : 1.5544E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	1.287E+00	8.182E-01	5.070E-01	8.182E-01
CO-60	8.869E+00	6.321E-01	8.929E-02	6.321E-01
CS-137	6.064E+00	5.861E-01	8.439E-02	5.861E-01
EU-155	1.781E-01	2.032E-01	1.767E-01	2.032E-01
TL-208	3.550E-01	1.493E-01	7.612E-02	1.493E-01
PO-209	2.612E+02	4.679E+01	2.264E+01	4.679E+01
BI-212	6.227E-01	9.396E-01	6.550E-01	9.396E-01
PB-212	1.239E+00	1.985E-01	1.047E-01	1.985E-01
PB-214	9.987E-01	2.589E-01	1.422E-01	2.589E-01
RA-223	5.883E-01	4.743E-01	3.136E-01	4.743E-01
NP-237	3.586E+01	3.308E+00	4.364E-01	3.308E+00
AM-241	1.496E+01	1.185E+00	1.574E-01	1.185E+00
AM-243	5.770E-01	1.492E-01	7.509E-02	1.492E-01
CM-243	1.637E-01	1.868E-01	1.572E-01	1.868E-01

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
RH-101	2.597E-02	6.871E-02	6.079E-02	6.871E-02	NOT IDENT.
SB-125	-1.103E-01	2.442E-01	2.076E-01	2.442E-01	NOT IDENT.
BI-211	1.481E+00	3.397E+00	2.590E+00	3.397E+00	NOT IDENT.
BI-214	1.001E+00	3.363E-01	2.053E-01	3.363E-01	FAIL ABUN
AC-228	1.077E+00	7.099E-01	5.049E-01	7.099E-01	FAIL ABUN
PA-233	4.286E-02	1.443E-01	1.305E-01	1.443E-01	NOT IDENT.
PA-234M	-2.139E+00	1.442E+01	1.200E+01	1.442E+01	NOT IDENT.
TH-234	9.686E-01	9.991E-01	7.784E-01	9.991E-01	FAIL ABUN
U-235	-9.008E-02	3.690E-01	3.264E-01	3.690E-01	NOT IDENT.
NP-236	-5.303E-02	1.070E-01	9.311E-02	1.070E-01	NOT IDENT.
NP-239	-1.720E-01	5.072E-01	4.322E-01	5.072E-01	NOT IDENT.
AM-246	-2.309E-02	4.452E-01	3.845E-01	4.452E-01	NOT IDENT.
CF-249	-2.175E-02	1.130E-01	8.461E-02	1.130E-01	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	1147.8208
63.29	874.1918
74.66	939.8574
74.81	913.2867
74.81	913.2867
77.11	843.0249
77.11	843.0249
86.48	1018.8121
87.30	915.7863
87.30	915.7863
92.58	435.1956
98.44	444.7864
103.76	422.6841
105.31	447.8132
129.07	342.1556
143.76	335.2204
198.00	324.0232
209.25	327.5335
228.18	342.1815
238.63	289.7875
242.00	290.6222
269.46	217.5844
270.25	273.3089
277.36	268.3019
295.22	262.4948
300.09	222.6849
312.17	225.5799
338.32	214.0999
351.93	220.9378
387.59	214.2109
409.46	210.5629
427.87	229.2365
463.00	232.6258
510.77	193.2748
583.19	136.0689
609.31	126.4005
661.66	136.8497
727.33	135.4900
763.13	145.2515
768.36	127.5859
785.37	151.4301
794.95	140.8744
806.17	144.4576
831.80	117.0514
860.56	149.1979
896.60	182.0397
911.20	177.8027
934.06	184.1955
964.77	206.2868
968.97	166.0896
1001.03	141.8801
1078.86	138.4585
1120.29	120.0234
1155.19	71.1429
1173.23	83.0695
1238.11	36.3290
1280.96	28.7734
1332.51	23.1003
1377.67	22.3261
1401.50	30.6090
1407.98	29.6311
1460.80	21.7075
1509.23	23.7601
1588.20	39.2764
1620.50	13.0883
1729.60	6.7895
1764.49	6.7272

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473842

Total Uranium Activity	-4.1679E-02	ug/g
Total Uranium Counting Unc.	1.7072E-01	ug/g
Total Uranium Tpu	1.7072E-07	ug/g
Total Uranium Mda	1.5100E-01	ug/g

Radiochemistry Batch Checklist, Rev 6

Batch# 708131 Product: γS SCAN Date: 12/14/07

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.		✓	Case Narrative
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.			NA
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA
Aliquot Correction completed if required.			NA

GEL Laboratories, LLC

1/2/2007

Primary Review Performed By: S. Eulard 12/14/07

Secondary Review Performed By: Heather Crow 12/14/07

Gamma Spec Que Sheet

12/05/2007

Batch #:708131 Analyst: MJH1 First Client DueDate:12/18/2007 Internal Due Date: 12/09/2007

Gamma Spike Isotope: Mixed Gamma Spike Code: N/A Expiration Date: N/A Vol: N/A Nominal Concentration: N/A

Gamma LCS Isotope: Mixed Gamma LCS Code: 1032-A Expiration Date: 12/3/08 Vol: 1.0mL Nominal Concentration: Am241-15.96 Cs137-6.103 Co60-8.52 ✓

Initials: MJH Prep Date: 12/5/07 Witness: N/A

Sample ID	Client Description / Container ID	Type	Hazard Code	RDL	Client	Matrix	Collect Date	Wet/Dry Aliquot (1 g F)	Detector	Sealing Date/Time (if Applicable)
198701017-1	SB-CZ-SS-2324-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MJ	152.45	5	
198701018-1	SB-CZ-SS-2325-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MJ	112.74	gamma	
198701019-1	SB-CZ-SS-2326-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MJ	118.80	gamma	
198701020-1	SB-CZ-SS-2327-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	123.16	5	
198701021-1	SB-CZ-SS-2328-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	133.96	21	
198701022-1	SB-CZ-SS-2329-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	156.22	22	
198701023-1	SB-CZ-SS-2330-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	113.44	23	
198701024-1	SB-CZ-SS-2331-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	142.16	21	
198701025-1	SB-CZ-SS-2332-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	122.29	22	
198701026-1	SB-CZ-SS-2333-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	131.04	23	
198701027-1	SB-CZ-SS-2334-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	155.93	5	
198701028-1	SB-CZ-SS-2335-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	123.23	7	
198701029-1	SB-CZ-SS-2336-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	141.79	12	
198701030-1	SB-CZ-SS-2337-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	148.48	19	
198701031-1	SB-CZ-SS-2338-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	142.71	20	
198701032-1	SB-CZ-SS-2339-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	133.70	6	
198701033-1	SB-CZ-SS-2340-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	133.40	17	
198701034-1	SB-CZ-SS-2341-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	109.22	14	
198701035-1	SB-CZ-SS-2342-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	139.70	16	
198701036-1	SB-CZ-SS-2343-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 "	128.13	21	
1201473843-1	MB for batch 708131	MB		.08 pCi/g	QC ACCOUNT	SOIL	12/5/07 MJ	156.22	1	
1201473844-1	SB-CZ-SS-2324-SD(198701017DUP	DUP		.08 pCi/g	QC ACCOUNT	SOIL	28-SEP-07 00:00:00 MJ	153.28	2	
1201473845-1	LCS for batch 708131	LCS		.08 pCi/g	QC ACCOUNT	SOIL	12/5/07 MJ	155.44	3	
							✓	✓	✓	MJH 12/11/07

GEL Laboratories LLC, Radiochemistry Division

Data Reviewed By: S. Eulane 12/14/07

Heather G Cesse 12/14/07

Failed RDL Report

Batch Id	Samp Id	Sample Type	Run Date	Parmname	Result	MDA	RDL
708131	198701017	SAMPLE	13-DEC-07				
708131	198701018	SAMPLE	13-DEC-07				
708131	198701019	SAMPLE	14-DEC-07				
708131	198701020	SAMPLE	13-DEC-07				
708131	198701021	SAMPLE	13-DEC-07				
708131	198701022	SAMPLE	13-DEC-07				
708131	198701023	SAMPLE	13-DEC-07				
708131	198701024	SAMPLE	14-DEC-07				
708131	198701025	SAMPLE	14-DEC-07				
708131	198701026	SAMPLE	14-DEC-07				
708131	198701027	SAMPLE	14-DEC-07				
708131	198701028	SAMPLE	14-DEC-07				
708131	198701029	SAMPLE	14-DEC-07				
708131	198701030	SAMPLE	14-DEC-07				
708131	198701031	SAMPLE	14-DEC-07				
708131	198701032	SAMPLE	14-DEC-07				
708131	198701033	SAMPLE	14-DEC-07				
708131	198701034	SAMPLE	14-DEC-07				
708131	198701035	SAMPLE	14-DEC-07				
708131	198701036	SAMPLE	14-DEC-07				
708131	1201473843	MB	14-DEC-07				
708131	1201473844	DUP	14-DEC-07				
708131	1201473845	LCS	14-DEC-07	Actinium-228	0.7917	0.893	0.800
				Antimony-125	-0.04313	0.3776	0.200
				Bismuth-212	1.042	1.311	0.500
				Potassium-40	0.7507	1.124	1.00
				Thorium-234	0.6712	1.778	0.500
				Uranium-235	0.05424	0.648	0.500

Gamma Review Report based on Result > MDA for Batch:708131

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701017	28-SEP-07 00:00	13-DEC-07 13:31	76.6	SAMPLE	LOAD	1	SCAN	SCAN00101GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.083	0.2122	pCi/g	0.13	0.800	911.7	1	2.018	IDENTIFIED	8.881	☐	
Americium-243 INT	0.159	0.02931	pCi/g	0.03137	Y	74.62	1	1.253	IDENTIFIED	8.48	☑ UI	
Bismuth-212 ✓	0.9617	0.3084	pCi/g	0.297	0.500	727.8	1	1.682	IDENTIFIED	15.79	☐	
Bismuth-214 ✓	0.7205	0.1075	pCi/g	0.07279	0.200	609.7	1	1.234	IDENTIFIED	6.623	☐	
Gross Gamma	5.45	1.31	pCi/g	2.295	N		0				☐	
Lead-212 ✓	1.011	0.1046	pCi/g	0.05886	0.100	238.7	1	1.219	IDENTIFIED	3.18	☐	
Lead-214 ✓	0.8303	0.1036	pCi/g	0.07371	0.100	352	1	1.449	IDENTIFIED	5.722	☐	
Neptunium-237 INT	0.4397	0.1234	pCi/g	0.1708	Y	87.08	1	1.19	IDENTIFIED	13.63	☑ UI	
Potassium-40 ✓	7.781	1.006	pCi/g	0.3332	1.00	1462	1	1.874	IDENTIFIED	5.264	☐	
Radium-223 INT	0.3185	0.1742	pCi/g	0.18	Y	270.2	1	1.702	IDENTIFIED	27.69	☑ UI	
Thallium-208 ✓	0.3102	0.05381	pCi/g	0.03844	0.080	583.5	1	1.674	IDENTIFIED	8.09	☐	
Thorium-234 ✓	1.582	0.3973	pCi/g	0.3979	0.500	92.62	1	1.625	IDENTIFIED	12.01	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701018	28-SEP-07 00:00	13-DEC-07 16:42	76.7	SAMPLE	LOAD	1	SCAN	SCAN00101GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.416	0.2182	pCi/g	0.1149	0.800	911	1	1.676	IDENTIFIED	5.972	☐	
Americium-243 INT	0.3023	0.04885	pCi/g	0.04406	Y	74.94	1	1.57	IDENTIFIED	7.225	☑ UI	
Bismuth-212 ✓	0.7908	0.2652	pCi/g	0.2536	0.500	726.9	1	1.924	IDENTIFIED	16.55	☐	
Bismuth-214 ✓	0.928	0.1148	pCi/g	0.06398	0.200	609.2	1	1.46	IDENTIFIED	5.038	☐	
Curium-243 INT	0.09393	0.06958	pCi/g	0.09299	Y	105.4	2	1.49	IDENTIFIED	37.62	☑ UI	
Europium-155 INT	0.1044	0.07733	pCi/g	0.1043	0.500	105.4	2	1.49	IDENTIFIED	37.62	☑ UI	
Lead-212 ✓	1.45	0.1177	pCi/g	0.05717	0.100	238.6	1	1.315	IDENTIFIED	2.621	☐	
Lead-214 ✓	1.081	0.1085	pCi/g	0.06506	0.100	351.9	1	1.385	IDENTIFIED	4.118	☐	
Neptunium-237 INT	0.9068	0.1925	pCi/g	0.1916	Y	87.3	1	1.492	IDENTIFIED	9.95	☑ UI	
Potassium-40 ✓	8.504	0.7811	pCi/g	0.2979	1.00	1461	1	2.153	IDENTIFIED	3.61	☐	
Protactinium-234m NUP	4.234	3.379	pCi/g	3.549	Y	1001	1	2.687	IDENTIFIED	40.46	☑ UI	
Radium-223 INT	0.5748	0.1692	pCi/g	0.1832	Y	270	1	1.662	IDENTIFIED	14.68	☑ UI	
Thallium-208 ✓	0.4331	0.05905	pCi/g	0.03151	0.080	583	1	1.482	IDENTIFIED	5.892	☐	
Thorium-234 ✓	1.024	0.4697	pCi/g	0.4244	0.500	92.74	1	1.298	IDENTIFIED	23.06	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701019	28-SEP-07 00:00	14-DEC-07 01:07	77	SAMPLE	LOAD	1	SCAN	SCAN00101GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.9337	0.1689	pCi/g	0.09955	0.800	911	1	1.829	IDENTIFIED	7.684	☐	
Americium-243 INT	0.1667	0.03688	pCi/g	0.03838	Y	74.91	1	1.331	IDENTIFIED	10.56	☑ UI	
Bismuth-212 ✓	0.4414	0.2364	pCi/g	0.2343	0.500	726.9	1	1.581	IDENTIFIED	26.98	☐	
Bismuth-214 ✓	0.6549	0.09051	pCi/g	0.05375	0.200	609.1	1	1.775	IDENTIFIED	5.937	☐	
Lead-212 ✓	1.01	0.09062	pCi/g	0.04933	0.100	238.6	1	1.32	IDENTIFIED	3.271	☐	
Lead-214 ✓	0.642	0.07902	pCi/g	0.06033	0.100	351.8	1	1.408	IDENTIFIED	5.491	☐	
Neptunium-236 INT	0.06271	0.04094	pCi/g	0.05407	Y	99.31	1	2.562	IDENTIFIED	33.09	☑ UI	
Neptunium-237 INT	0.5475	0.1454	pCi/g	0.182	Y	87.29	1	1.255	IDENTIFIED	12.86	☑ UI	
Potassium-40 ✓	3.778	0.3521	pCi/g	0.2744	1.00	1461	1	2.354	IDENTIFIED	6.83	☐	
Radium-223 INT	0.1901	0.1275	pCi/g	0.1533	Y	270	1	0.9674	IDENTIFIED	34.07	☑ UI	
Thallium-208 ✓	0.3167	0.04534	pCi/g	0.02843	0.080	583	1	1.424	IDENTIFIED	6.298	☐	
Thorium-234 ✓	0.6047	0.4002	pCi/g	0.4032	0.500	92.72	1	1.227	IDENTIFIED	33.52	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701020	28-SEP-07 00:00	13-DEC-07 18:35	76.8	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.2	0.1716	pCi/g	0.1024	0.800	911.6	1	1.778	IDENTIFIED	5.664	☐	
Americium-241 NA	0.04312	0.02501	pCi/g	0.04129	0.200	87.15	2	1.144	NOT_IDENTI	9.005	☑ UI	Data rejected due to low abundance.
Americium-243 INT	0.1994	0.02585	pCi/g	0.02458	Y	74.68	1	1.23	IDENTIFIED	5.214	☑ UI	
Bismuth-212 ✓	0.8068	0.2787	pCi/g	0.2293	0.500	728	1	1.531	IDENTIFIED	17.1	☐	
Bismuth-214 ✓	0.3769	0.08121	pCi/g	0.05887	0.200	609.7	1	1.354	IDENTIFIED	10.33	☐	
Lead-212 ✓	1.274	0.1187	pCi/g	0.04252	0.100	238.7	1	1.166	IDENTIFIED	2.2	☐	
Lead-214 ✓	0.4888	0.07757	pCi/g	0.05367	0.100	352	1	1.332	IDENTIFIED	7.599	☐	
Neptunium-236 INT	0.0428	0.03138	pCi/g	0.03967	Y	99.11	1	1.953	IDENTIFIED	37.12	☑ UI	
Neptunium-237 INT	0.5624	0.1104	pCi/g	0.1357	Y	87.15	2	1.144	IDENTIFIED	9.005	☑ UI	
Potassium-40 ✓	3.627	0.4988	pCi/g	0.2704	1.00	1462	1	1.863	IDENTIFIED	5.784	☐	
Radium-223 INT	0.3503	0.1342	pCi/g	0.1343	Y	270.5	1	1.952	IDENTIFIED	19.24	☑ UI	
Thallium-208 ✓	0.4299	0.04833	pCi/g	0.02901	0.080	583.5	1	1.445	IDENTIFIED	4.474	☐	
Thorium-234 ✓	1.792	0.3189	pCi/g	0.3165	0.500	92.71	1	1.291	IDENTIFIED	7.902	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701021	28-SEP-07 00:00	13-DEC-07 18:36	76.8	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.076	0.1711	pCi/g	0.1196	0.800	911.1	1	1.719	IDENTIFIED	7.374	☐	
Americium-243 INT	0.1992	0.02476	pCi/g	0.02113	Y	74.97	1	1.598	IDENTIFIED	5.314	☑ UI	
Bismuth-212 ✓	0.7568	0.2462	pCi/g	0.2335	0.500	727.5	1	1.521	IDENTIFIED	16.11	☐	
Bismuth-214 ✓	0.6675	0.0945	pCi/g	0.05747	0.200	609.3	1	1.775	IDENTIFIED	6.146	☐	
Gross Gamma	5.247	0.9577	pCi/g	1.857	N		0				☐	
Lead-212 ✓	1.192	0.08764	pCi/g	0.04031	0.100	238.6	1	1.487	IDENTIFIED	2.167	☐	
Lead-214 ✓	0.6814	0.07488	pCi/g	0.0514	0.100	351.9	1	1.596	IDENTIFIED	4.971	☐	
Neptunium-236 INT	0.05039	0.02612	pCi/g	0.03061	Y	99.14	1	2.013	IDENTIFIED	26.16	☑ UI	
Neptunium-237 INT	0.4987	0.08996	pCi/g	0.1144	Y	87.28	1	1.287	IDENTIFIED	8.438	☑ UI	
Potassium-40 ✓	6.657	0.7315	pCi/g	0.314	1.00	1461	1	2.495	IDENTIFIED	4.878	☐	
Radium-223 INT	0.3048	0.1251	pCi/g	0.1313	Y	270.5	1	1.583	IDENTIFIED	20.76	☑ UI	
Thallium-208 ✓	0.3729	0.0479	pCi/g	0.02939	0.080	583.2	1	1.665	IDENTIFIED	5.446	☐	
Thorium-234 ✓	1.385	0.2541	pCi/g	0.2576	0.500	93.03	1	1.673	IDENTIFIED	8.559	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701022	28-SEP-07 00:00	13-DEC-07 18:36	76.8	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.6896	0.1023	pCi/g	0.05251	0.800	910.7	1	2.136	IDENTIFIED	5.719	☐	
Americium-243 INT	0.0984	0.01901	pCi/g	0.02358	Y	74.67	1	1.133	IDENTIFIED	9.038	☑ UI	
Bismuth-212 ✓	0.4031	0.1131	pCi/g	0.1189	0.500	726.9	1	1.868	IDENTIFIED	13.57	☐	
Bismuth-214 ✓	0.665	0.07349	pCi/g	0.03216	0.200	608.9	1	1.778	IDENTIFIED	3.935	☐	
Cesium-137 ✓	0.08073	0.01457	pCi/g	0.01581	0.100	661.2	1	1.74	IDENTIFIED	8.096	☐	
Curium-243 INT	0.06191	0.03169	pCi/g	0.04615	Y	105.2	2	1.743	IDENTIFIED	25.85	☑ UI	
Europium-155 INT	0.06881	0.03522	pCi/g	0.05119	0.500	105.2	2	1.743	IDENTIFIED	25.85	☑ UI	
Lead-212 ✓	0.6763	0.0503	pCi/g	0.02756	0.100	238.4	1	1.272	IDENTIFIED	2.336	☐	
Lead-214 ✓	0.7682	0.05999	pCi/g	0.03106	0.100	[illegible]	1	[illegible]	IDENTIFIED	2.762	☐	
Neptunium-237 INT	0.3346	0.0759	pCi/g	0.0955	Y	87.02	1	1.172	IDENTIFIED	10.72	☑ UI	
Potassium-40 ✓	3.428	0.3345	pCi/g	0.1399	1.00	1460	1	2.912	IDENTIFIED	4.018	☐	
Protactinium-234m NV P	2.635	2.322	pCi/g	1.713	Y	1000	1	2.236	IDENTIFIED	44.73	☑ UI	
Radium-223 INT	0.1994	0.08662	pCi/g	0.08719	Y	270	1	1.468	IDENTIFIED	21.97	☑ UI	
Thallium-208 ✓	0.2098	0.02654	pCi/g	0.01514	0.080	582.8	1	1.686	IDENTIFIED	5.166	☐	
Thorium-234 ✓	0.6307	0.2107	pCi/g	0.2094	0.500	92.54	1	[illegible]	IDENTIFIED	16.53	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701023	28-SEP-07 00:00	13-DEC-07 18:37	76.8	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.222	0.1802	pCi/g	0.09287	0.800	910.8	1	1.73	IDENTIFIED	6.373	☐	
Americium-243 INT	0.1283	0.03707	pCi/g	0.03782	Y	74.66	1	0.8606	IDENTIFIED	14.31	☑ UI	
Bismuth-212 ✓	0.8161	0.2133	pCi/g	0.2186	0.500	727	1	1.216	IDENTIFIED	12.93	☐	
Bismuth-214 ✓	0.474	0.06598	pCi/g	0.05221	0.200	609.2	1	1.627	IDENTIFIED	6.488	☐	
Lead-212 ✓	1.172	0.08342	pCi/g	0.04194	0.100	238.7	1	1.005	IDENTIFIED	2.287	☐	
Lead-214 ✓	0.5155	0.07409	pCi/g	0.05094	0.100	351.9	1	1.054	IDENTIFIED	6.819	☐	
Neptunium-236 INT	0.05165	0.03343	pCi/g	0.03577	Y	99.44	1	1.506	IDENTIFIED	32.84	☑ UI	
Neptunium-237 INT	0.3163	0.135	pCi/g	0.1434	Y	86.64	1	1.055	IDENTIFIED	21.46	☑ UI	
Potassium-40 ✓	2.634	0.489	pCi/g	0.2448	1.00	1460	1	2.244	IDENTIFIED	8.777	☐	
Radium-223 INT	0.369	0.1244	pCi/g	0.1228	Y	270.4	1	1.228	IDENTIFIED	16.94	☑ UI	
Thallium-208 ✓	0.3708	0.04487	pCi/g	0.02621	0.080	583	1	1.382	IDENTIFIED	5.476	☐	
Thorium-234 ✓	1.45	0.3318	pCi/g	0.2964	0.500	92.89	1	1.172	IDENTIFIED	11.11	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701024	28-SEP-07 00:00	14-DEC-07 05:10	77.2	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.227	0.2098	pCi/g	0.1775	0.800	911.2	1	1.843	IDENTIFIED	8.04	☐	
Americium-243 INT	0.242	0.03614	pCi/g	0.03267	Y	74.95	1	1.86	IDENTIFIED	6.786	☑ UI	
Bismuth-212 ✓	0.7719	0.3318	pCi/g	0.3588	0.500	727.6	1	1.323	IDENTIFIED	21.56	☐	
Bismuth-214 ✓	1.189	0.1483	pCi/g	0.08556	0.200	609.4	1	1.783	IDENTIFIED	5.107	☐	
Curium-243 INT	0.08742	0.06726	pCi/g	0.08456	Y	105.5	2	1.859	IDENTIFIED	39.05	☑ UI	
Europium-155 INT	0.09718	0.07477	pCi/g	0.09085	0.500	105.5	2	1.859	IDENTIFIED	39.05	☑ UI	
Gross Gamma	6.745	1.442	pCi/g	2.827	N		0				☐	
Lead-212 ✓	1.206	0.1006	pCi/g	0.06117	0.100	238.6	1	1.455	IDENTIFIED	2.956	☐	
Lead-214 ✓	1.122	0.1301	pCi/g	0.07791	0.100	352	1	1.442	IDENTIFIED	5.314	☐	
Neptunium-237 INT	0.6649	0.1308	pCi/g	0.159	Y	87.27	1	1.388	IDENTIFIED	9.337	☑ UI	
Potassium-40 ✓	8.48	1.028	pCi/g	0.499	1.00	1461	1	2.308	IDENTIFIED	5.536	☐	
Radium-223 INT	0.3846	0.1854	pCi/g	0.2081	Y	270.2	1	1.566	IDENTIFIED	24.45	☑ UI	
Thallium-208 ✓	0.3922	0.06474	pCi/g	0.04207	0.080	583.1	1	1.558	IDENTIFIED	7.593	☐	
Thorium-234 ✓	1.498	0.3755	pCi/g	0.3697	0.500	92.89	1	1.807	IDENTIFIED	12.21	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701025	28-SEP-07 00:00	14-DEC-07 05:11	77.2	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.5906	0.1201	pCi/g	0.0866	0.800	910.7	1	2.142	IDENTIFIED	9.113	☐	
Americium-243 INT	0.06423	0.02461	pCi/g	0.03484	Y	74.69	1	1.014	IDENTIFIED	19.15	☑ UI	
Bismuth-214 ✓	0.3028	0.05839	pCi/g	0.04107	0.200	609.1	1	1.706	IDENTIFIED	8.971	☐	
Cesium-137 ✓	0.22	0.0343	pCi/g	0.0263	0.100	661.2	1	1.624	IDENTIFIED	6.636	☐	
Lead-212 ✓	0.5907	0.05933	pCi/g	0.04104	0.100	238.4	1	1.521	IDENTIFIED	4.162	☐	
Lead-214 ✓	0.3681	0.05858	pCi/g	0.04958	0.100	351.6	1	1.461	IDENTIFIED	7.594	☐	
Neptunium-237 MPW	0.4039	0.1893	pCi/g	0.1477	Y	85.64	1	3.905	IDENTIFIED	23.52	☑ UI	Data rejected due to high peak-width.
Potassium-40 ✓	3.555	0.4523	pCi/g	0.2277	1.00	1460	1	2.581	IDENTIFIED	5.789	☐	
Radium-223 INT	0.2483	0.1337	pCi/g	0.1292	Y	270.4	1	1.382	IDENTIFIED	27.31	☑ UI	
Thallium-208 ✓	0.1907	0.03144	pCi/g	0.02223	0.080	582.6	1	1.954	IDENTIFIED	7.473	☐	
Thorium-234 ✓	0.7613	0.3192	pCi/g	0.3212	0.500	92.53	1	1.323	IDENTIFIED	20.99	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701026	28-SEP-07 00:00	14-DEC-07 05:12	77.2	SAMPLE	LOAD		SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.6123	0.1604	pCi/g	0.1181	0.800	910.9	1	1.372	IDENTIFIED	12.76	☐	
Americium-243 INT	0.1115	0.03236	pCi/g	0.03927	Y	74.95	1	0.9789	IDENTIFIED	14.37	☑ UI	
Bismuth-212 ✓	0.3859	0.2695	pCi/g	0.2291	0.500	727.9	1	1.569	IDENTIFIED	35.48	☐	
Bismuth-214 ✓	0.4677	0.0901	pCi/g	0.06168	0.200	609.2	1	1.237	IDENTIFIED	9.394	☐	
Cesium-137 ✓	0.06363	0.03879	pCi/g	0.03451	0.100	662.2	1	1.729	IDENTIFIED	30.96	☐	
Lead-212 ✓	0.5338	0.05991	pCi/g	0.05134	0.100	238.6	1	0.9776	IDENTIFIED	4.984	☐	
Lead-214 ✓	0.4487	0.08098	pCi/g	0.06653	0.100	351.9	1	1.094	IDENTIFIED	8.804	☐	
Neptunium-237 INT	0.2448	0.1464	pCi/g	0.1762	Y	87.21	1	1.047	IDENTIFIED	30.28	☑ UI	
Potassium-40 ✓	5.253	0.6986	pCi/g	0.3046	1.00	1460	1	2.222	IDENTIFIED	5.771	☐	
Radium-223 INT	0.2182	0.1302	pCi/g	0.168	Y	270.1	1	1.608	IDENTIFIED	30.3	☑ UI	
Thallium-208 ✓	0.1959	0.04085	pCi/g	0.03462	0.080	583.1	1	1.452	IDENTIFIED	10.25	☐	
Thorium-234 ✓	0.5012	0.2929	pCi/g	0.3598	0.500	92.7	1	0.902	IDENTIFIED	29.59	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701027	28-SEP-07 00:00	14-DEC-07 06:38	77.3	SAMPLE	LOAD	1	SCAN	SCAN00101GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.1	0.1946	pCi/g	0.137	0.800	911.6	1	1.828	IDENTIFIED	7.769	☐	
Americium-243 INT	0.2009	0.03083	pCi/g	0.03049	Y	74.63	1	1.4	IDENTIFIED	6.688	☑ UI	
Bismuth-212 ✓	0.5326	0.2427	pCi/g	0.2992	0.500	727.7	1	1.186	IDENTIFIED	22.86	☐	
Bismuth-214 ✓	0.7801	0.1155	pCi/g	0.07998	0.200	609.6	1	1.369	IDENTIFIED	6.559	☐	
Lead-212 ✓	1	0.1033	pCi/g	0.05856	0.100	238.7	1	1.12	IDENTIFIED	3.17	☐	
Lead-214 ✓	0.8271	0.09841	pCi/g	0.07167	0.100	351.9	1	1.411	IDENTIFIED	5.389	☐	
Neptunium-236 NA	0.06418	0.03189	pCi/g	0.05482	Y	92.63	2	1.256	NOT_IDENTI	10.96	☑ UI	Data rejected due to low abundance.
Neptunium-237 INT	0.6144	0.1365	pCi/g	0.1648	Y	87.04	1	1.313	IDENTIFIED	10.46	☑ UI	
Potassium-40 ✓	7.099	0.8766	pCi/g	0.3398	1.00	1462	1	2.143	IDENTIFIED	4.889	☐	
Radium-223 INT	0.4784	0.1824	pCi/g	0.1798	Y	269.9	1	1.581	IDENTIFIED	19.14	☑ UI	
Thallium-208 ✓	0.3427	0.05213	pCi/g	0.03806	0.080	583.3	1	1.348	IDENTIFIED	6.883	☐	
Thorium-234 ✓	1.432	0.3323	pCi/g	0.3839	0.500	92.63	2	1.256	IDENTIFIED	10.96	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701028	28-SEP-07 00:00	14-DEC-07 06:41	77.3	SAMPLE	LOAD	1	SCAN	SCAN00101GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	1.153	0.1832	pCi/g	0.1367	0.800	911.5	1	1.834	IDENTIFIED	7.365	☐	
Americium-243 INT	0.1613	0.03125	pCi/g	0.03707	Y	74.98	1	0.9624	IDENTIFIED	9.279	☑ UI	
Bismuth-212 ✓	0.7315	0.2746	pCi/g	0.2624	0.500	727.6	1	2.445	IDENTIFIED	18.8	☐	
Bismuth-214 ✓	0.7532	0.1036	pCi/g	0.06092	0.200	609.7	1	1.425	IDENTIFIED	6.113	☐	
Gross Gamma	5.138	1.304	pCi/g	2.29	N		0				☐	
Lead-212 ✓	1.078	0.09147	pCi/g	0.05177	0.100	238.9	1	1.162	IDENTIFIED	3.132	☐	
Lead-214 ✓	0.7552	0.09092	pCi/g	0.06401	0.100	352.2	1	1.276	IDENTIFIED	5.465	☐	
Neptunium-237 INT	0.6095	0.1345	pCi/g	0.1644	Y	87.4	1	1.039	IDENTIFIED	10.55	☑ UI	
Potassium-40 ✓	5.517	0.6966	pCi/g	0.2755	1.00	1461	1	1.692	IDENTIFIED	5.84	☐	
Radium-223 INT	0.3217	0.1714	pCi/g	0.1715	Y	271.1	1	1.651	IDENTIFIED	27.01	☑ UI	
Thallium-208 ✓	0.3094	0.04962	pCi/g	0.03408	0.080	583.4	1	1.536	IDENTIFIED	7.466	☐	
Thorium-234 ✓	1.226	0.3487	pCi/g	0.369	0.500	92.9	1	1.225	IDENTIFIED	13.99	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701029	28-SEP-07 00:00	14-DEC-07 06:43	77.3	SAMPLE	LOAD	1	SCAN	SCAN00101GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.7954	0.1772	pCi/g	0.1076	0.800	910.8	1	1.723	IDENTIFIED	10.1	☐	
Americium-243 INT	0.1217	0.03344	pCi/g	0.04775	Y	74.82	1	1.015	IDENTIFIED	13.54	☑ UI	
Bismuth-212 ✓	0.6096	0.2161	pCi/g	0.2351	0.500	727.2	1	1.272	IDENTIFIED	17.47	☐	
Bismuth-214 ✓	0.7196	0.1057	pCi/g	0.06106	0.200	609.2	1	1.669	IDENTIFIED	6.281	☐	

Cesium-137 ✓	**0.2344**	0.04518	pCi/g	**0.03501**	**0.100**	661.3	1	1.61	IDENTIFIED	8.778	☐	
Lead-212 ✓	**0.7936**	0.07591	pCi/g	**0.04995**	**0.100**	238.6	1	1.25	IDENTIFIED	3.789	☐	
Lead-214 ✓	**0.8757**	0.09977	pCi/g	**0.06579**	**0.100**	351.8	1	1.307	IDENTIFIED	5.016	☐	
Neptunium-237 INT	**0.5159**	0.1561	pCi/g	**0.1991**	**Y**	87.32	1	1.345	IDENTIFIED	14.92	☑	UI
Potassium-40 ✓	**4.974**	0.6736	pCi/g	**0.2607**	**1.00**	1460	1	2.127	IDENTIFIED	6.199	☐	
Radium-223 INT	**0.2796**	0.1902	pCi/g	**0.1617**	**Y**	270.5	1	1.63	IDENTIFIED	34.58	☑	UI
Thallium-208 ✓	**0.2326**	0.04766	pCi/g	**0.02993**	**0.080**	583	1	1.513	IDENTIFIED	9.689	☐	
Thorium-234 ✓	**0.7452**	0.3838	pCi/g	**0.4307**	**0.500**	92.78	1	1.306	IDENTIFIED	26	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701030	28-SEP-07 00:00	14-DEC-07 07:31	77.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.6964**	0.1433	pCi/g	**0.1047**	**0.800**	912	1	1.778	IDENTIFIED	9.118	☐	
Americium-243 INT	**0.09821**	0.02653	pCi/g	**0.04096**	**Y**	74.97	1	1.01	IDENTIFIED	13.41	☑	UI
Bismuth-212 ✓	**0.6344**	0.2247	pCi/g	**0.2093**	**0.500**	727.8	1	1.796	IDENTIFIED	17.53	☐	
Bismuth-214 ✓	**0.5272**	0.08549	pCi/g	**0.05547**	**0.200**	609.5	1	1.546	IDENTIFIED	7.343	☐	
Cesium-137 ✓	**0.1889**	0.03442	pCi/g	**0.03031**	**0.100**	661.9	1	1.81	IDENTIFIED	8.37	☐	
Lead-212 ✓	**0.676**	0.06796	pCi/g	**0.04338**	**0.100**	238.6	1	1.473	IDENTIFIED	4.049	☐	
Lead-214 ✓	**0.6323**	0.0831	pCi/g	**0.05519**	**0.100**	351.8	1	1.442	IDENTIFIED	5.995	☐	
Neptunium-237 INT	**0.2684**	0.1183	pCi/g	**0.1742**	**Y**	87.13	1	1.377	IDENTIFIED	22.22	☑	UI
Potassium-40 ✓	**4.242**	0.6168	pCi/g	**0.2641**	**1.00**	1462	1	1.808	IDENTIFIED	6.734	☐	
Radium-223 INT	**0.2969**	0.1315	pCi/g	**0.1502**	**Y**	270.1	1	2.193	IDENTIFIED	22.37	☑	UI
Thallium-208 ✓	**0.2018**	0.03809	pCi/g	**0.02965**	**0.080**	583.6	1	1.493	IDENTIFIED	8.89	☐	
Thorium-234 ✓	**0.5823**	0.3973	pCi/g	**0.3966**	**0.500**	93.45	1	1.5	IDENTIFIED	34.65	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701031	28-SEP-07 00:00	14-DEC-07 07:32	77.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.6409**	0.1351	pCi/g	**0.08462**	**0.800**	911.6	1	1.214	IDENTIFIED	9.681	☐	
Americium-243 INT	**0.1054**	0.02677	pCi/g	**0.0309**	**Y**	74.97	1	1.188	IDENTIFIED	11.77	☑	UI
Bismuth-212 ✓	**0.4355**	0.1698	pCi/g	**0.1718**	**0.500**	727.8	1	2.368	IDENTIFIED	19.54	☐	
Bismuth-214 ✓	**0.5157**	0.07305	pCi/g	**0.05**	**0.200**	609.6	1	1.493	IDENTIFIED	6.456	☐	
Cesium-137 ✓	**0.2297**	0.03183	pCi/g	**0.02324**	**0.100**	661.9	1	1.539	IDENTIFIED	6.19	☐	
Lead-212 ✓	**0.6435**	0.06199	pCi/g	**0.04339**	**0.100**	238.7	1	1.268	IDENTIFIED	3.958	☐	
Lead-214 ✓	**0.5455**	0.07093	pCi/g	**0.0489**	**0.100**	351.8	1	1.398	IDENTIFIED	6.026	☐	
Neptunium-237 INT	**0.3539**	0.1214	pCi/g	**0.1444**	**Y**	87.29	1	1.363	IDENTIFIED	16.47	☑	UI
Potassium-40 ✓	**3.894**	0.5469	pCi/g	**0.2619**	**1.00**	1462	1	1.842	IDENTIFIED	5.803	☐	
Radium-223 INT	**0.1977**	0.1128	pCi/g	**0.1292**	**Y**	270	1	2.531	IDENTIFIED	28.94	☑	UI
Thallium-208 ✓	**0.185**	0.03765	pCi/g	**0.02256**	**0.080**	583.5	1	1.388	IDENTIFIED	9.888	☐	
Thorium-234 ✓	**0.609**	0.2929	pCi/g	**0.3189**	**0.500**	92.73	1	1.286	IDENTIFIED	23.94	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701032	28-SEP-07 00:00	14-DEC-07 08:11	77.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.7181**	0.1636	pCi/g	**0.1196**	**0.800**	910.8	1	1.454	IDENTIFIED	10.46	☐	
Americium-243 INT	**0.1063**	0.03795	pCi/g	**0.04713**	**Y**	74.49	1	1.18	IDENTIFIED	17.74	☑	UI
Bismuth-212 ✓	**0.6822**	0.2275	pCi/g	**0.2695**	**0.500**	727.1	1	1.776	IDENTIFIED	16.58	☐	
Bismuth-214 ✓	**0.4648**	0.1019	pCi/g	**0.06744**	**0.200**	608.9	1	1.349	IDENTIFIED	10.67	☐	
Cesium-137 ✓	**0.2682**	0.04708	pCi/g	**0.03729**	**0.100**	661.3	1	1.635	IDENTIFIED	8.302	☐	
Lead-212 ✓	**0.7547**	0.0765	pCi/g	**0.0541**	**0.100**	238.3	1	1.088	IDENTIFIED	4.122	☐	
Lead-214 ✓	**0.5843**	0.1012	pCi/g	**0.07541**	**0.100**	351.7	1	1.266	IDENTIFIED	8.26	☐	
Potassium-40 ✓	**4.989**	0.7306	pCi/g	**0.3068**	**1.00**	1460	1	1.978	IDENTIFIED	6.752	☐	
Radium-223 INT	**0.3262**	0.1701	pCi/g	**0.18**	**Y**	270.3	1	1.227	IDENTIFIED	26.42	☑	UI

Thallium-208 ✓	**0.212**	0.04373	pCi/g	**0.03558**	**0.080**	582.7	1	1.48	IDENTIFIED	9.98	☐
Thorium-234 ✓	**1.162**	0.4355	pCi/g	**0.3954**	**0.500**	92.47	1	1.465	IDENTIFIED	18.67	☐

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701033	28-SEP-07 00:00	14-DEC-07 08:19	77.3	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.9987**	0.1969	pCi/g	**0.1595**	**0.800**	911.1	1	1.476	IDENTIFIED	9.488	☐	
Americium-243 INT	**0.1719**	0.02703	pCi/g	**0.03001**	**Y**	74.96	1	0.9617	IDENTIFIED	7.337	☑ UI	
Bismuth-212 ✓	**0.7077**	0.2442	pCi/g	**0.3116**	**0.500**	727.6	1	1.88	IDENTIFIED	17.22	☐	
Bismuth-214 ✓	**0.7421**	0.1284	pCi/g	**0.07344**	**0.200**	609.3	1	1.522	IDENTIFIED	8.081	☐	
Cesium-137 ✓	**0.08426**	0.0412	pCi/g	**0.04546**	**0.100**	661.6	1	0.9111	IDENTIFIED	24.68	☐	
Lead-212 ✓	**0.9574**	0.0985	pCi/g	**0.05259**	**0.100**	238.7	1	1.011	IDENTIFIED	3.422	☐	
Lead-214 ✓	**0.8005**	0.09276	pCi/g	**0.06957**	**0.100**	352	1	1.188	IDENTIFIED	4.918	☐	
Neptunium-237 INT	**0.4364**	0.1238	pCi/g	**0.1595**	**Y**	87.34	1	1.066	IDENTIFIED	14.07	☑ UI	
Potassium-40 ✓	**6.671**	0.7847	pCi/g	**0.3142**	**1.00**	1461	1	1.947	IDENTIFIED	5.351	☐	
Radium-223 INT	**0.214**	0.1533	pCi/g	**0.1754**	**Y**	270.2	1	1.142	IDENTIFIED	36.34	☑ UI	
Thallium-208 ✓	**0.3191**	0.05162	pCi/g	**0.03928**	**0.080**	583.2	1	1.373	IDENTIFIED	7.482	☐	
Thorium-234 ✓	**0.7759**	0.3568	pCi/g	**0.3707**	**0.500**	92.86	1	1.117	IDENTIFIED	23.19	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701034	28-SEP-07 00:00	14-DEC-07 08:33	77.4	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.7763**	0.1635	pCi/g	**0.1193**	**0.800**	911.4	1	1.511	IDENTIFIED	9.796	☐	
Americium-243 INT	**0.1258**	0.0417	pCi/g	**0.03738**	**Y**	74.81	1	1.678	IDENTIFIED	16.5	☑ UI	
Bismuth-212 ✓	**0.5012**	0.3157	pCi/g	**0.246**	**0.500**	727.7	1	1.659	IDENTIFIED	31.88	☐	
Bismuth-214 ✓	**0.5273**	0.09966	pCi/g	**0.06042**	**0.200**	609.2	1	1.813	IDENTIFIED	8.904	☐	
Cesium-137 ✓	**0.2727**	0.04729	pCi/g	**0.03601**	**0.100**	661.7	1	1.477	IDENTIFIED	7.946	☐	
Lead-212 ✓	**0.7112**	0.0765	pCi/g	**0.05183**	**0.100**	238.5	1	1.474	IDENTIFIED	4.517	☐	
Lead-214 ✓	**0.556**	0.08675	pCi/g	**0.0625**	**0.100**	351.8	1	1.459	IDENTIFIED	7.382	☐	
Neptunium-237 INT	**0.4937**	0.1518	pCi/g	**0.1738**	**Y**	87.2	1	1.454	IDENTIFIED	15.13	☑ UI	
Potassium-40 ✓	**4.237**	0.5724	pCi/g	**0.3155**	**1.00**	1461	1	1.634	IDENTIFIED	6.308	☐	
Radium-223 INT	**0.205**	0.1698	pCi/g	**0.1676**	**Y**	270.5	1	2.226	IDENTIFIED	42.14	☑ UI	
Thallium-208 ✓	**0.2044**	0.04439	pCi/g	**0.0333**	**0.080**	583.1	1	1.482	IDENTIFIED	10.48	☐	
Thorium-234 ✓	**1.114**	0.398	pCi/g	**0.3838**	**0.500**	92.75	1	1.666	IDENTIFIED	17.79	☐	
Uranium-235 NVP	**0.2437**	0.1642	pCi/g	**0.1757**	**0.500**	144.1	1	0.7168	IDENTIFIED	34.24	☑ UI	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701035	28-SEP-07 00:00	14-DEC-07 08:42	77.4	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.7175**	0.1432	pCi/g	**0.1066**	**0.800**	911	1	1.703	IDENTIFIED	9.295	☐	
Americium-243 INT	**0.1262**	0.03715	pCi/g	**0.03666**	**Y**	74.81	1	1.675	IDENTIFIED	14.65	☑ UI	
Bismuth-212 ✓	**0.4933**	0.241	pCi/g	**0.2097**	**0.500**	727.3	1	1.012	IDENTIFIED	24.55	☐	
Bismuth-214 ✓	**0.581**	0.07382	pCi/g	**0.04509**	**0.200**	609.3	1	1.509	IDENTIFIED	5.216	☐	
Cesium-137 ✓	**0.1842**	0.03524	pCi/g	**0.01624**	**0.100**	661.5	1	1.396	IDENTIFIED	8.801	☐	
Lead-212 ✓	**0.6706**	0.05977	pCi/g	**0.04409**	**0.100**	238.6	1	1.037	IDENTIFIED	3.583	☐	
Lead-214 ✓	**0.6437**	0.07419	pCi/g	**0.04748**	**0.100**	351.9	1	1.2	IDENTIFIED	5.269	☐	
Neptunium-237 INT	**0.4206**	0.1395	pCi/g	**0.1617**	**Y**	87.35	1	1.499	IDENTIFIED	16.51	☑ UI	
Potassium-40 ✓	**5.466**	0.5866	pCi/g	**0.2632**	**1.00**	1460	1	2.335	IDENTIFIED	4.557	☐	
Radium-223 INT	**0.3218**	0.1206	pCi/g	**0.1374**	**Y**	269.9	1	1.515	IDENTIFIED	18.91	☑ UI	
Thallium-208 ✓	**0.2028**	0.03827	pCi/g	**0.03034**	**0.080**	583.2	1	1.312	IDENTIFIED	8.904	☐	
Thorium-234 ✓	**1.036**	0.308	pCi/g	**0.3551**	**0.500**	92.75	1	1.391	IDENTIFIED	14.73	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701036	28-SEP-07 00:00	14-DEC-07 09:34	77.4	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.7686**	0.2017	pCi/g	**0.1494**	**0.800**	911.5	1	1.745	IDENTIFIED	12.96	☐	
Americium-243 INT	**0.167**	0.03039	pCi/g	**0.02693**	**Y**	74.95	1	1.86	IDENTIFIED	8.614	☑ UI	
Bismuth-212 NVP	**0.6337**	0.329	pCi/g	**0.3065**	**0.500**	726.5	1	2.88	IDENTIFIED	26.18	☑ UI	
Bismuth-214 ✓	**0.7152**	0.1119	pCi/g	**0.08187**	**0.200**	609.2	1	1.51	IDENTIFIED	7.025	☐	
Cesium-137 ✓	**0.1078**	0.05105	pCi/g	**0.04614**	**0.100**	661.9	1	1.306	IDENTIFIED	23.81	☐	
Lead-212 ✓	**0.7361**	0.07498	pCi/g	**0.05267**	**0.100**	238.6	1	1.584	IDENTIFIED	4.199	☐	
Lead-214 ✓	**0.6133**	0.09788	pCi/g	**0.07247**	**0.100**	352	1	1.524	IDENTIFIED	7.719	☐	
Neptunium-237 INT	**0.379**	0.1065	pCi/g	**0.1553**	**Y**	87.34	1	1.346	IDENTIFIED	13.86	☑ UI	
Potassium-40 ✓	**3.951**	0.8591	pCi/g	**0.4647**	**1.00**	1461	1	2.539	IDENTIFIED	10.74	☐	
Radium-223 INT	**0.2597**	0.1504	pCi/g	**0.1826**	**Y**	270.3	1	1.847	IDENTIFIED	29.43	☑ UI	
Thallium-208 ✓	**0.2248**	0.0523	pCi/g	**0.03791**	**0.080**	583	1	1.66	IDENTIFIED	11.3	☐	
Thorium-234 ✓	**1.008**	0.2735	pCi/g	**0.3416**	**0.500**	92.99	1	1.773	IDENTIFIED	13.31	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473843		14-DEC-07 10:21	0	MB	LOAD	1		GEL	N	RGSP

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473844	28-SEP-07 00:00	14-DEC-07 10:21	77.4	DUP	LOAD	1		SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Actinium-228 ✓	**0.9911**	0.174	pCi/g	**0.1083**	**0.800**	911.1	1	1.905	IDENTIFIED	8.07	☐	
Americium-243 INT	**0.1422**	0.03595	pCi/g	**0.0448**	**Y**	74.82	1	1.038	IDENTIFIED	12.21	☑ UI	
Bismuth-212 ✓	**0.7809**	0.2374	pCi/g	**0.2259**	**0.500**	727	1	1.594	IDENTIFIED	15.15	☐	
Bismuth-214 ✓	**0.6322**	0.08328	pCi/g	**0.05455**	**0.200**	609.2	1	1.644	IDENTIFIED	6.007	☐	
Lead-212 ✓	**0.8862**	0.07817	pCi/g	**0.04896**	**0.100**	238.6	1	1.121	IDENTIFIED	3.271	☐	
Lead-214 ✓	**0.6482**	0.0814	pCi/g	**0.05963**	**0.100**	351.9	1	1.093	IDENTIFIED	5.687	☐	
Neptunium-237 INT	**0.4178**	0.1618	pCi/g	**0.1921**	**Y**	87.14	1	1.368	IDENTIFIED	19.28	☑ UI	
Potassium-40 ✓	**7.755**	0.818	pCi/g	**0.237**	**1.00**	1460	1	2.214	IDENTIFIED	4.256	☐	
Radium-223 INT	**0.2753**	0.1351	pCi/g	**0.154**	**Y**	270.2	1	1.678	IDENTIFIED	24.82	☑ UI	
Thallium-208 ✓	**0.2626**	0.04115	pCi/g	**0.02903**	**0.080**	583.1	1	1.499	IDENTIFIED	7.422	☐	
Thorium-234 ✓	**1.034**	0.3993	pCi/g	**0.4088**	**0.500**	92.68	1	1.264	IDENTIFIED	19.29	☐	
Uranium-235 NVP	**0.1794**	0.1481	pCi/g	**0.1603**	**0.500**	143.9	1	1.039	IDENTIFIED	42.03	☑ UI	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473845		14-DEC-07 10:22	0	LCS	LOAD	1		GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act	Rpt Err(%)	Qual	Qual Comment
Americium-241	**13.09**	1.37	pCi/g	**0.7186**	**0.200**	59.77	1	1.305	IDENTIFIED	3.557	☐	
Bismuth-214	**0.6171**	0.2475	pCi/g	**0.3718**	**0.200**	609.4	1	1.712	FAIL_ABUND	20.17	☐	
Cesium-137	**5.926**	0.4923	pCi/g	**0.1523**	**0.100**	661.7	1	2.146	IDENTIFIED	2.528	☐	
Cobalt-60	**8.204**	0.7001	pCi/g	**0.169**	**0.100**	1174	1	2.828	IDENTIFIED	2.387	☐	
Gross Gamma	**38.71**	6.533	pCi/g	**7.985**	**N**		0				☐	
Lead-212	**1.002**	0.1814	pCi/g	**0.1993**	**0.100**	238.6	1	1.539	IDENTIFIED	8.655	☐	
Lead-214	**0.7687**	0.2611	pCi/g	**0.2733**	**0.100**	352.1	1	1.851	IDENTIFIED	17.03	☐	
Neptunium-237	**30.52**	2.876	pCi/g	**1.081**	**Y**	88.09	1	1.411	IDENTIFIED	2.291	☐	
Polonium-209	**241.7**	46.81	pCi/g	**40.28**	**Y**	898.4	1	2.453	IDENTIFIED	8.1	☐	
Thallium-208	**0.3713**	0.126	pCi/g	**0.1436**	**0.080**	583.1	1	2.218	IDENTIFIED	16.98	☐	

*** = Number of isotopes identified with a keyline at this energy.

GEL QUALS

Batch ID: 708131

Report run on: December 14, 2007 4:45 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701017-1 13-DEC-2007 13:31	Americium-243	UI	UI	UI	Data rejected due to interference.		.159			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4397			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3185			
198701018-1 13-DEC-2007 16:42	Americium-243	UI	UI	UI	Data rejected due to interference.		.3023			
	Curium-243	UI	UI	UI	Data rejected due to interference.		.09393			
	Europium-155	UI	UI	UI	Data rejected due to interference.		.1044		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.9068			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		4.234			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.5748			
198701020-1 13-DEC-2007 18:35	Americium-241	UI	UI	UI	Data rejected due to low abundance.		.04312		.2	.2
	Americium-243	UI	UI	UI	Data rejected due to interference.		.1994			
	Neptunium-236	UI	UI	UI	Data rejected due to interference.		.0428			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5624			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3503			
198701021-1 13-DEC-2007 18:36	Americium-243	UI	UI	UI	Data rejected due to interference.		.1992			
	Neptunium-236	UI	UI	UI	Data rejected due to interference.		.05039			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4987			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3048			
198701022-1 13-DEC-2007 18:36	Americium-243	UI	UI	UI	Data rejected due to interference.		.0984			
	Curium-243	UI	UI	UI	Data rejected due to interference.		.06191			

GEL QUALS

Batch ID: 708131

Report run on: December 14, 2007 4:45 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701022-1 13-DEC-2007 18:36	Europium-155	UI	UI	UI	Data rejected due to interference.		.06881		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3346			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		2.635			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.1994			
198701023-1 13-DEC-2007 18:37	Americium-243	UI	UI	UI	Data rejected due to interference.		.1283			
	Neptunium-236	UI	UI	UI	Data rejected due to interference.		.05165			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3163			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.369			
198701019-1 14-DEC-2007 01:07	Americium-243	UI	UI	UI	Data rejected due to interference.		.1667			
	Neptunium-236	UI	UI	UI	Data rejected due to interference.		.06271			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5475			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.1901			
198701024-1 14-DEC-2007 05:10	Americium-243	UI	UI	UI	Data rejected due to interference.		.242			
	Curium-243	UI	UI	UI	Data rejected due to interference.		.08742			
	Europium-155	UI	UI	UI	Data rejected due to interference.		.09718		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.6649			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3846			
198701025-1 14-DEC-2007 05:11	Americium-243	UI	UI	UI	Data rejected due to interference.		.06423			
	Neptunium-237	UI	UI	UI	Data rejected due to high peak-width.		.4039			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2483			

GEL QUALS

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Report run on: December 14, 2007 4:45 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701026-1 14-DEC-2007 05:12	Americium-243	UI	UI	UI	Data rejected due to interference.		.1115			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.2448			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2182			
198701027-1 14-DEC-2007 06:38	Americium-243	UI	UI	UI	Data rejected due to interference.		.2009			
	Neptunium-236	UI	UI	UI	Data rejected due to low abundance.		.06418			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.6144			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.4784			
198701028-1 14-DEC-2007 06:41	Americium-243	UI	UI	UI	Data rejected due to interference.		.1613			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.6095			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3217			
198701029-1 14-DEC-2007 06:43	Americium-243	UI	UI	UI	Data rejected due to interference.		.1217			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5159			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2796			
198701030-1 14-DEC-2007 07:31	Americium-243	UI	UI	UI	Data rejected due to interference.		.09821			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.2684			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2969			
198701031-1 14-DEC-2007 07:32	Americium-243	UI	UI	UI	Data rejected due to interference.		.1054			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3539			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.1977			

GEL QUALS

Batch ID: 708131

Report run on: December 14, 2007 4:45 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701032-1 14-DEC-2007 08:11	Americium-243	UI	UI	UI	Data rejected due to interference.		.1063			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3262			
198701033-1 14-DEC-2007 08:19	Americium-243	UI	UI	UI	Data rejected due to interference.		.1719			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4364			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.214			
198701034-1 14-DEC-2007 08:33	Americium-243	UI	UI	UI	Data rejected due to interference.		.1258			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4937			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.205			
	Uranium-235	UI	UI	UI	Data rejected due to no valid peak.		.2437		.5	.5
198701035-1 14-DEC-2007 08:42	Americium-243	UI	UI	UI	Data rejected due to interference.		.1262			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4206			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3218			
198701036-1 14-DEC-2007 09:34	Americium-243	UI	UI	UI	Data rejected due to interference.		.167			
	Bismuth-212	UI	UI	UI	Data rejected due to no valid peak.		.6337		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.379			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2597			
1201473844-1 DUP 14-DEC-2007 10:21	Americium-243	UI	UI	UI	Data rejected due to interference.		.1422			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4178			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2753			

GEL QUALS

Batch ID: 708131

Report run on: December 14, 2007 4:45 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
1291473844-1 DUP 14-DEC-2007 10:21	Uranium-235	UI	UI	UI	Data rejected due to no valid peak.		.1794		.5	.5

VAX/VMS Nuclide Identification Report Generated 13-DEC-2007 17:31:56.51

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701017.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 13:31:21
Sample ID        : G198701017           Sample quantity  : 1.52450E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.84  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.03*	89	666	1.16	92.85	86	13	6.15E-03	69.0	
2	0	52.87	68	313	1.50	106.51	104	6	4.72E-03	42.8	
3	0	63.09*	162	730	1.00	126.93	123	10	1.13E-02	33.8	
4	3	74.62*	646	681	1.25	149.98	145	14	4.49E-02	8.5	8.27E-01
5	3	76.93*	973	512	1.06	154.61	145	14	6.76E-02	5.3	
6	5	83.90*	101	592	1.43	168.53	165	29	6.99E-03	42.1	1.51E+00
7	5	87.08*	318	556	1.19	174.89	165	29	2.21E-02	13.6	
8	5	89.76	256	445	1.05	180.24	165	29	1.78E-02	14.4	
9	5	92.62*	494	677	1.63	185.97	165	29	3.43E-02	12.0	
10	0	98.97	105	520	2.06	198.66	195	9	7.30E-03	40.2	
11	0	105.68	74	545	0.71	212.08	207	9	5.11E-03	58.6	
12	0	129.16	81	613	1.36	258.99	253	10	5.59E-03	58.6	
13	0	154.40	101	552	0.88	309.46	304	10	7.02E-03	44.6	
14	0	160.88	64	444	1.69	322.39	318	9	4.44E-03	60.7	
15	0	186.16*	208	501	1.37	372.93	368	10	1.44E-02	23.4	
16	0	209.33	159	420	1.05	419.23	414	10	1.10E-02	25.5	
17	0	231.33	51	292	1.76	463.20	460	8	3.53E-03	60.3	
18	2	238.68*	1588	298	1.22	477.89	473	18	1.10E-01	3.2	1.40E+00
19	2	241.71	466	316	1.83	483.96	473	18	3.24E-02	11.8	
20	0	270.20	144	367	1.70	540.89	537	12	1.00E-02	27.7	
21	0	277.64	73	254	1.13	555.75	552	9	5.07E-03	41.1	
22	0	295.32*	461	289	1.44	591.09	586	11	3.20E-02	8.9	
23	0	300.22	96	244	1.23	600.88	597	10	6.67E-03	32.2	
24	0	328.05	133	249	1.73	656.49	650	12	9.24E-03	25.2	
25	0	338.35*	313	271	1.33	677.07	672	11	2.17E-02	12.0	
26	0	351.99*	830	272	1.45	704.34	696	14	5.76E-02	5.7	
27	0	410.25	19	229	0.68	820.76	816	11	1.31E-03	157.0	
28	0	462.55	73	202	1.49	925.26	920	13	5.06E-03	41.9	
29	0	510.84*	230	200	1.90	1021.75	1012	20	1.59E-02	19.5	
30	0	534.47	43	64	2.42	1068.97	1065	8	3.01E-03	35.4	
31	0	561.13	53	161	4.29	1122.24	1116	14	3.68E-03	52.6	
32	0	583.54	449	194	1.67	1167.00	1159	14	3.12E-02	8.1	
33	0	609.68*	547	143	1.23	1219.24	1212	14	3.80E-02	6.6	
34	0	661.49	50	113	1.21	1322.75	1318	12	3.50E-03	44.2	
35	0	727.84	160	101	1.68	1455.29	1449	15	1.11E-02	15.8	
36	0	763.93*	15	85	1.41	1527.40	1523	8	1.01E-03	122.0	
37	0	770.10	90	155	4.68	1539.72	1531	19	6.25E-03	35.0	
38	0	783.64	80	190	8.18	1566.77	1553	29	5.58E-03	50.3	

Sample ID : G198701017 Acquisition date : 13-DEC-2007 13:31:21

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	796.07	27	95	0.92	1591.59	1585	11	1.91E-03	71.6	
40	0	818.22	56	170	10.36	1635.84	1615	31	3.89E-03	70.3	
41	1	836.33	35	50	1.84	1672.02	1669	16	2.40E-03	35.3	5.86E+00
42	1	839.62	46	95	2.25	1678.59	1669	16	3.17E-03	45.6	
43	0	861.91	73	107	1.40	1723.13	1715	16	5.09E-03	33.8	
44	0	870.30	19	54	0.78	1739.87	1733	11	1.29E-03	80.8	
45	0	911.65*	326	89	2.02	1822.48	1816	18	2.26E-02	8.9	
46	0	934.75*	17	66	1.93	1868.61	1860	12	1.16E-03	111.0	
47	1	964.64	60	61	2.34	1928.30	1922	25	4.15E-03	28.0	1.60E+00
48	1	969.43	195	46	1.92	1937.88	1922	25	1.35E-02	10.1	
49	0	1029.78	17	28	2.59	2058.42	2054	10	1.18E-03	62.6	
50	0	1033.55	17	22	1.06	2065.95	2063	7	1.17E-03	51.5	
51	0	1040.49	28	37	0.90	2079.80	2074	11	1.92E-03	47.2	
52	0	1120.37*	134	58	1.75	2239.34	2229	17	9.29E-03	16.6	
53	0	1140.94	23	25	0.96	2280.40	2278	7	1.57E-03	42.3	
54	0	1239.46	47	102	1.23	2477.15	2468	19	3.29E-03	53.6	
55	0	1379.00	60	39	2.09	2755.77	2746	16	4.18E-03	26.7	
56	0	1461.67*	658	88	1.87	2920.83	2912	19	4.57E-02	5.3	
57	0	1548.91	15	16	3.79	3094.99	3089	11	1.07E-03	56.8	
58	0	1594.86	57	48	9.06	3186.72	3164	34	3.94E-03	40.9	
59	0	1631.78	14	15	0.89	3260.43	3251	15	9.72E-04	66.0	
60	0	1662.71*	14	22	1.10	3322.16	3309	17	9.53E-04	85.9	
61	0	1671.00	27	5	0.77	3338.71	3330	19	1.87E-03	27.4	
62	0	1706.84	18	3	3.14	3410.25	3404	13	1.26E-03	31.0	
63	0	1731.49	27	5	1.97	3459.44	3454	11	1.88E-03	25.4	
64	0	1765.88*	100	23	2.32	3528.08	3520	19	6.94E-03	16.4	
65	0	1797.72	9	8	0.65	3591.65	3581	15	5.90E-04	78.1	
66	0	1848.40	30	7	1.56	3692.79	3685	15	2.08E-03	27.0	
67	0	1954.45	7	8	3.55	3904.44	3899	9	4.98E-04	88.6	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701017       *
* Acquisition date : 13-DEC-2007 13:31:21 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.84     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701017           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5245E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	7.781E+00	1.006E+00	3.332E-01	0.000E+00
CS-137	3.878E-02	3.375E-02	4.125E-02	0.000E+00
EU-155	6.402E-02	7.382E-02	9.838E-02	0.000E+00
TL-208	3.102E-01	5.381E-02	3.844E-02	0.000E+00
BI-212	9.617E-01	3.084E-01	2.970E-01	0.000E+00
PB-212	1.011E+00	1.046E-01	5.886E-02	0.000E+00
BI-214	7.205E-01	1.075E-01	7.279E-02	0.000E+00
PB-214	8.303E-01	1.036E-01	7.371E-02	0.000E+00
RA-223	3.185E-01	1.742E-01	1.800E-01	0.000E+00
AC-228	1.083E+00	2.122E-01	1.300E-01	0.000E+00
TH-234	1.582E+00	3.973E-01	3.979E-01	0.000E+00
NP-236	4.867E-02	3.857E-02	5.046E-02	0.000E+00
NP-237	4.397E-01	1.234E-01	1.708E-01	0.000E+00
AM-243	1.590E-01	2.931E-02	3.137E-02	0.000E+00
CM-243	5.760E-02	6.642E-02	8.959E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	2.159E-03	2.433E-02	4.202E-02	0.000E+00	NOT IDENT.
RH-101	1.011E-02	2.309E-02	3.777E-02	0.000E+00	NOT IDENT.
SB-125	2.258E-03	6.025E-02	1.046E-01	0.000E+00	NOT IDENT.
PO-209	4.562E-01	4.720E+00	8.059E+00	0.000E+00	NOT IDENT.
BI-211	-2.174E-01	7.382E-01	1.045E+00	0.000E+00	NOT IDENT.
PA-233	1.620E-02	3.734E-02	6.765E-02	0.000E+00	NOT IDENT.
PA-234M	2.447E+00	2.891E+00	5.149E+00	0.000E+00	NOT IDENT.
U-235	-7.642E-03	1.214E-01	2.056E-01	0.000E+00	NOT IDENT.
NP-239	-3.242E-02	1.537E-01	2.280E-01	0.000E+00	NOT IDENT.
AM-241	1.766E-02	2.981E-02	5.064E-02	0.000E+00	NOT IDENT.
AM-246	-2.443E-02	8.305E-02	1.403E-01	0.000E+00	NOT IDENT.
CF-249	1.428E-02	2.462E-02	4.422E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-DEC-2007 17:31:58.09

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701017.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 13:31:21
Sample ID        : G198701017           Sample quantity  : 1.52450E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.84  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	658	10.66*	9.764E-01	7.781E+00	7.781E+00	13.19
CS-137	661.66	50	85.10*	1.888E+00	3.859E-02	3.878E-02	88.80
EU-155	105.31	74	21.20*	6.877E+00	6.218E-02	6.402E-02	117.66
TL-208	277.36	73	6.31	3.978E+00	3.584E-01	3.584E-01	82.55
	510.77	230	22.60	2.368E+00	5.283E-01	5.283E-01	39.48
	583.19	449	84.50*	2.107E+00	3.102E-01	3.102E-01	17.70
	763.13	15	1.81	1.668E+00	5.940E-01	5.940E-01	244.23
	860.56	73	12.42	1.506E+00	4.820E-01	4.820E-01	68.18
BI-212	727.33	160	11.80*	1.739E+00	9.617E-01	9.617E-01	32.73
	785.37	80	1.10	1.632E+00	5.514E+00	5.514E+00	101.00
	1620.50	------	1.49	8.967E-01	------	Line Not Found	------
PB-212	74.81	646	10.40	7.333E+00	1.043E+00	1.043E+00	18.81
	77.11	973	17.50	7.312E+00	9.359E-01	9.359E-01	13.46
	87.30	318	7.81	7.190E+00	6.980E-01	6.980E-01	28.63
	238.63	1588	43.30*	4.466E+00	1.011E+00	1.011E+00	10.55
	300.09	96	3.28	3.737E+00	9.651E-01	9.651E-01	64.76
BI-214	609.31	547	46.10*	2.027E+00	7.204E-01	7.205E-01	15.23
	768.36	90	4.94	1.657E+00	1.354E+00	1.354E+00	70.46
	806.17	------	1.22	1.594E+00	------	Line Not Found	------
	934.06	17	3.03	1.407E+00	4.835E-01	4.835E-01	222.21
	1120.29	134	15.10	1.212E+00	8.991E-01	8.992E-01	33.81
	1155.19	------	1.63	1.183E+00	------	Line Not Found	------
	1238.11	47	5.79	1.117E+00	9.024E-01	9.025E-01	107.41
	1280.96	------	1.43	1.087E+00	------	Line Not Found	------
	1377.67	60	4.00	1.024E+00	1.810E+00	1.810E+00	54.09
	1401.50	------	1.27	1.011E+00	------	Line Not Found	------
	1407.98	------	2.15	1.007E+00	------	Line Not Found	------
	1509.23	------	2.11	9.511E-01	------	Line Not Found	------
	1729.60	27	2.92	8.481E-01	1.345E+00	1.345E+00	51.15
	1764.49	100	15.40	8.341E-01	9.575E-01	9.575E-01	33.33
PB-214	74.81	646	6.44	7.333E+00	1.684E+00	1.684E+00	18.81
	77.11	973	10.80	7.312E+00	1.517E+00	1.517E+00	13.46

Sample ID : G198701017 Acquisition date : 13-DEC-2007 13:31:21

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	318	4.84	7.190E+00	1.126E+00	1.126E+00	28.63
	242.00	466	7.43	4.424E+00	1.746E+00	1.746E+00	24.94
	295.22	461	19.30	3.787E+00	7.758E-01	7.758E-01	18.97
	351.93	830	37.60*	3.274E+00	8.303E-01	8.303E-01	12.74
RA-223	269.46	144	13.70*	4.064E+00	3.185E-01	3.185E-01	55.82
AC-228	129.07	81	2.42	6.407E+00	6.393E-01	6.393E-01	117.62
	209.25	159	3.89	4.902E+00	1.024E+00	1.024E+00	51.86
	270.25	144	3.46	4.064E+00	1.261E+00	1.261E+00	55.82
	338.32	313	11.27	3.385E+00	1.010E+00	1.010E+00	24.72
	409.46	19	1.92	2.870E+00	4.231E-01	4.231E-01	313.94
	463.00	73	4.40	2.584E+00	7.890E-01	7.890E-01	83.90
	794.95	27	4.25	1.611E+00	4.941E-01	4.941E-01	143.44
	911.20	326	25.80*	1.437E+00	1.083E+00	1.083E+00	20.00
	964.77	60	4.99	1.371E+00	1.074E+00	1.074E+00	56.72
	968.97	195	15.80	1.365E+00	1.113E+00	1.113E+00	21.97
	1588.20	------	3.22	9.118E-01	------	Line Not Found	------
TH-234	63.29	162	4.80	7.386E+00	5.636E-01	5.636E-01	68.02
	92.58	494	5.41*	7.107E+00	1.582E+00	1.582E+00	25.62
NP-236	98.44	105	38.00*	7.000E+00	4.867E-02	4.867E-02	80.86
NP-237	86.48	318	12.40*	7.190E+00	4.397E-01	4.397E-01	28.63
AM-243	74.66	646	68.20*	7.333E+00	1.590E-01	1.590E-01	18.81
CM-243	103.76	74	23.00*	6.877E+00	5.731E-02	5.760E-02	117.66

Flag: "*" = Keyline

Sample ID : G198701017 Acquisition date : 13-DEC-2007 13:31:21

Total number of lines in spectrum 67
Number of unidentified lines 28
Number of lines tentatively identified by NID 39 58.21%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	7.781E+00	7.781E+00	1.026E+00	13.19	
CS-137	9.47E+08S	1.00	3.859E-02	3.878E-02	3.444E-02	88.80	
EU-155	1.57E+08S	1.03	6.218E-02	6.402E-02	7.533E-02	117.66	
TL-208	4.43E+17S	1.00	3.102E-01	3.102E-01	0.549E-01	17.70	
BI-212	4.43E+17S	1.00	9.617E-01	9.617E-01	3.147E-01	32.73	
PB-212	4.43E+17S	1.00	1.011E+00	1.011E+00	0.107E+00	10.55	
BI-214	5.05E+10S	1.00	7.204E-01	7.205E-01	1.097E-01	15.23	
PB-214	5.05E+10S	1.00	8.303E-01	8.303E-01	1.057E-01	12.74	
RA-223	1.04E+12S	1.00	3.185E-01	3.185E-01	1.778E-01	55.82	
AC-228	4.43E+17S	1.00	1.083E+00	1.083E+00	0.217E+00	20.00	
TH-234	1.41E+17S	1.00	1.582E+00	1.582E+00	0.405E+00	25.62	
NP-236	4.89E+12S	1.00	4.867E-02	4.867E-02	3.936E-02	80.86	
NP-237	6.75E+13S	1.00	4.397E-01	4.397E-01	1.259E-01	28.63	
AM-243	2.33E+11S	1.00	1.590E-01	1.590E-01	0.299E-01	18.81	
CM-243	8.99E+08S	1.01	5.731E-02	5.760E-02	6.778E-02	117.66	
			---	---			
	Total Activity :		1.540E+01	1.541E+01			

Grand Total Activity : 1.540E+01 1.541E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701017 Acquisition date : 13-DEC-2007 13:31:21

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.03	89	666	1.16	92.85	86	13	6.15E-03	****	7.28E+00	
0	52.87	68	313	1.50	106.51	104	6	4.72E-03	85.6	7.35E+00	
5	83.90	101	592	1.43	168.53	165	29	6.99E-03	84.2	7.23E+00	
5	89.76	256	445	1.05	180.24	165	29	1.78E-02	28.9	7.15E+00	
0	154.40	101	552	0.88	309.46	304	10	7.02E-03	89.3	5.89E+00	
0	160.88	64	444	1.69	322.39	318	9	4.44E-03	****	5.76E+00	
0	186.16	208	501	1.37	372.93	368	10	1.44E-02	46.7	5.29E+00	
0	231.33	51	292	1.76	463.20	460	8	3.53E-03	****	4.57E+00	
0	328.05	133	249	1.73	656.49	650	12	9.24E-03	50.5	3.47E+00	
0	534.47	43	64	2.42	1068.97	1065	8	3.01E-03	70.7	2.28E+00	
0	561.13	53	161	4.29	1122.24	1116	14	3.68E-03	****	2.18E+00	
0	818.22	56	170	10.36	1635.84	1615	31	3.89E-03	****	1.57E+00	
1	836.33	35	50	1.84	1672.02	1669	16	2.40E-03	70.5	1.54E+00	
1	839.62	46	95	2.25	1678.59	1669	16	3.17E-03	91.2	1.54E+00	
0	870.30	19	54	0.78	1739.87	1733	11	1.29E-03	****	1.49E+00	
0	1029.78	17	28	2.59	2058.42	2054	10	1.18E-03	****	1.30E+00	
0	1033.55	17	22	1.06	2065.95	2063	7	1.17E-03	****	1.30E+00	
0	1040.49	28	37	0.90	2079.80	2074	11	1.92E-03	94.3	1.29E+00	
0	1140.94	23	25	0.96	2280.40	2278	7	1.57E-03	84.5	1.19E+00	
0	1548.91	15	16	3.79	3094.99	3089	11	1.07E-03	****	9.31E-01	
0	1594.86	57	48	9.06	3186.72	3164	34	3.94E-03	81.7	9.09E-01	
0	1631.78	14	15	0.89	3260.43	3251	15	9.72E-04	****	8.92E-01	
0	1662.71	14	22	1.10	3322.16	3309	17	9.53E-04	****	8.78E-01	
0	1671.00	27	5	0.77	3338.71	3330	19	1.87E-03	54.7	8.74E-01	
0	1706.84	18	3	3.14	3410.25	3404	13	1.26E-03	62.1	8.58E-01	
0	1797.72	9	8	0.65	3591.65	3581	15	5.90E-04	****	8.21E-01	
0	1848.40	30	7	1.56	3692.79	3685	15	2.08E-03	54.0	8.02E-01	
0	1954.45	7	8	3.55	3904.44	3899	9	4.98E-04	****	7.64E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701017            *
* Acquisition date : 13-DEC-2007 13:31:21 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.84     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701017           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5245E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	7.781E+00	1.006E+00	1.667E-01	1.006E+00
CS-137	3.878E-02	3.375E-02	2.064E-02	3.375E-02
EU-155	6.402E-02	7.382E-02	4.922E-02	7.382E-02
TL-208	3.102E-01	5.381E-02	1.923E-02	5.381E-02
BI-212	9.617E-01	3.084E-01	1.486E-01	3.084E-01
PB-212	1.011E+00	1.046E-01	2.945E-02	1.046E-01
BI-214	7.205E-01	1.075E-01	3.642E-02	1.075E-01
PB-214	8.303E-01	1.036E-01	3.688E-02	1.036E-01
RA-223	3.185E-01	1.742E-01	9.004E-02	1.742E-01
AC-228	1.083E+00	2.122E-01	6.504E-02	2.122E-01
TH-234	1.582E+00	3.973E-01	1.991E-01	3.973E-01
NP-236	4.867E-02	3.857E-02	2.525E-02	3.857E-02
NP-237	4.397E-01	1.234E-01	8.545E-02	1.234E-01
AM-243	1.590E-01	2.931E-02	1.569E-02	2.931E-02
CM-243	5.760E-02	6.642E-02	4.482E-02	6.642E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.159E-03	2.433E-02	2.102E-02	2.433E-02	NOT IDENT.
RH-101	1.011E-02	2.309E-02	1.890E-02	2.309E-02	NOT IDENT.
SB-125	2.258E-03	6.025E-02	5.235E-02	6.025E-02	NOT IDENT.
PO-209	4.562E-01	4.720E+00	4.032E+00	4.720E+00	NOT IDENT.
BI-211	-2.174E-01	7.382E-01	5.228E-01	7.382E-01	NOT IDENT.
PA-233	1.620E-02	3.734E-02	3.384E-02	3.734E-02	NOT IDENT.
PA-234M	2.447E+00	2.891E+00	2.576E+00	2.891E+00	NOT IDENT.
U-235	-7.642E-03	1.214E-01	1.028E-01	1.214E-01	NOT IDENT.
NP-239	-3.242E-02	1.537E-01	1.141E-01	1.537E-01	NOT IDENT.
AM-241	1.766E-02	2.981E-02	2.534E-02	2.981E-02	NOT IDENT.
AM-246	-2.443E-02	8.305E-02	7.020E-02	8.305E-02	NOT IDENT.
CF-249	1.428E-02	2.462E-02	2.212E-02	2.462E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	423.5899
63.29	563.5570
74.66	637.3639
74.81	637.5426
74.81	637.5426
77.11	622.9761
77.11	622.9761
86.48	606.1478
87.30	606.9922
87.30	606.9922
92.58	612.3278
98.44	473.9618
103.76	528.3551
105.31	511.7865
129.07	494.3142
143.76	486.9409
198.00	424.0572
209.25	412.1647
228.18	363.2045
238.63	354.7866
242.00	355.8084
269.46	277.7673
270.25	281.0295
277.36	294.1207
295.22	284.8415
300.09	255.8507
312.17	229.4033
338.32	231.6171
351.93	229.7753
387.59	193.7939
409.46	211.9192
427.87	187.0899
463.00	157.1796
510.77	143.8823
583.19	134.2176
609.31	132.9545
661.66	125.3658
727.33	107.7188
763.13	80.1583
768.36	107.6506
785.37	96.2734
794.95	98.3246
806.17	84.8562
831.80	92.5929
860.56	88.1958
896.60	86.4094
911.20	68.1328
934.06	74.0394
964.77	63.8000
968.97	63.8806
1001.03	75.2395
1078.86	77.2354
1120.29	63.3457
1155.19	74.9885
1173.23	65.6829
1238.11	82.4766
1280.96	56.5547
1332.51	44.1918
1377.67	38.5633
1401.50	49.9946
1407.98	55.1752
1460.80	36.1792
1509.23	33.4208
1588.20	37.1533
1620.50	23.6835
1729.60	25.4606
1764.49	22.2104

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701017

Total Uranium Activity	-3.5362E-03	ug/g
Total Uranium Counting Unc.	5.6150E-02	ug/g
Total Uranium Tpu	5.6150E-08	ug/g
Total Uranium Mda	4.7587E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 01:03:01.03

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701018.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 16:42:20
Sample ID        : G198701018           Sample quantity  : 1.12740E+02 GRAM
Detector name    : GAMAN                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:06.39  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	32.73	76	873	1.26	65.44	64	6	2.55E-03	62.0	
2	0	63.40*	168	1649	1.20	126.74	123	10	5.58E-03	49.9	
3	3	74.94*	1168	1500	1.57	149.81	143	17	3.89E-02	7.2	5.97E+00
4	3	77.22*	1531	1137	1.17	154.36	143	17	5.10E-02	5.1	
5	2	84.45*	218	1484	1.49	168.82	163	29	7.25E-03	33.9	3.56E+00
6	2	87.30	728	1406	1.49	174.52	163	29	2.43E-02	9.9	
7	2	90.00	493	1180	1.32	179.93	163	29	1.64E-02	13.2	
8	2	92.74*	370	1099	1.30	185.40	163	29	1.23E-02	23.1	
9	0	105.45	149	1003	1.49	210.80	207	8	4.98E-03	37.6	
10	0	129.02	162	1381	1.03	257.91	253	10	5.40E-03	43.6	
11	0	144.16*	43	1059	1.38	288.18	284	8	1.42E-03	148.1	
12	0	154.55	46	1014	1.01	308.95	306	8	1.54E-03	120.1	
13	0	185.80*	504	1188	1.42	371.44	365	11	1.68E-02	16.3	
14	0	209.48	251	1039	1.50	418.77	414	10	8.37E-03	24.8	
15	5	238.64*	3278	638	1.32	477.08	471	17	1.09E-01	2.6	1.35E+00
16	5	241.49	800	717	1.95	482.77	471	17	2.67E-02	8.6	
17	0	259.15	50	671	0.60	518.08	512	9	1.67E-03	94.7	
18	0	270.04	381	734	1.66	539.85	535	11	1.27E-02	14.7	
19	0	277.91	136	811	1.09	555.58	550	11	4.55E-03	41.4	
20	0	295.18*	992	691	1.31	590.12	585	11	3.31E-02	6.4	
21	0	300.16*	161	567	1.60	600.07	596	9	5.38E-03	30.9	
22	0	328.48	207	685	2.39	656.69	651	12	6.91E-03	26.2	
23	0	338.17*	694	683	1.34	676.06	670	13	2.31E-02	9.2	
24	0	351.90*	1657	593	1.39	703.51	698	12	5.52E-02	4.1	
25	0	410.12	73	483	1.34	819.93	814	11	2.42E-03	60.0	
26	0	463.18	189	404	1.46	926.03	918	13	6.28E-03	23.2	
27	0	510.86*	269	662	1.93	1021.37	1013	19	8.98E-03	29.4	
28	0	562.75	50	239	2.11	1125.14	1121	9	1.65E-03	58.1	
29	0	583.04*	1049	442	1.48	1165.71	1158	16	3.50E-02	5.9	
30	0	609.23*	1187	374	1.46	1218.07	1211	14	3.96E-02	5.0	
31	0	662.07*	32	180	1.18	1323.75	1318	8	1.08E-03	86.6	
32	0	717.29	40	235	0.67	1434.17	1431	12	1.34E-03	77.4	
33	0	726.91*	226	206	1.92	1453.42	1448	11	7.54E-03	16.6	
34	0	768.09*	91	197	1.86	1535.76	1530	10	3.05E-03	36.9	
35	0	771.85	55	161	0.91	1543.28	1540	9	1.84E-03	43.4	
36	0	786.26	88	172	1.22	1572.10	1566	11	2.93E-03	31.1	
37	0	794.99	145	194	1.61	1589.57	1584	12	4.83E-03	21.0	
38	0	860.55	172	229	1.76	1720.68	1711	18	5.75E-03	22.0	

Sample ID : G198701018 Acquisition date : 13-DEC-2007 16:42:20

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	911.00*	739	183	1.68	1821.59	1815	15	2.46E-02	6.0	
40	0	934.32	52	108	1.09	1868.24	1864	9	1.72E-03	39.4	
41	1	964.53*	119	117	2.14	1928.66	1920	26	3.95E-03	30.7	1.61E+00
42	1	968.89	457	102	2.08	1937.39	1920	26	1.52E-02	6.8	
43	0	983.02	20	116	1.45	1965.64	1959	11	6.50E-04	109.1	
44	0	1000.62*	67	104	2.69	2000.85	1993	13	2.22E-03	40.5	
45	0	1032.82	46	72	2.43	2065.25	2061	9	1.52E-03	36.6	
46	1	1049.89	49	91	2.19	2099.40	2095	16	1.64E-03	36.2	2.89E+00
47	1	1052.69	41	124	1.99	2105.00	2095	16	1.35E-03	56.9	
48	0	1063.51	47	114	1.34	2126.65	2121	12	1.57E-03	47.7	
49	0	1120.32*	297	160	2.16	2240.30	2233	19	9.90E-03	13.6	
50	0	1154.79	46	111	1.86	2309.25	2305	10	1.53E-03	45.4	
51	0	1237.60	119	189	1.92	2474.91	2468	19	3.97E-03	28.9	
52	0	1250.17	31	90	1.36	2500.05	2492	12	1.03E-03	63.8	
53	0	1368.06	20	107	0.68	2735.92	2726	18	6.72E-04	122.8	
54	0	1377.98*	50	78	0.93	2755.77	2749	12	1.66E-03	42.9	
55	0	1408.55	59	59	2.39	2816.93	2810	12	1.95E-03	29.4	
56	0	1460.78*	1263	115	2.15	2921.42	2911	17	4.21E-02	3.6	
57	0	1497.19	36	91	6.67	2994.27	2980	19	1.21E-03	65.0	
58	3	1509.74	68	48	2.93	3019.39	3012	21	2.26E-03	26.4	1.32E+00
59	3	1513.25	46	24	2.93	3026.42	3012	21	1.55E-03	29.6	
60	0	1588.03	68	46	1.83	3176.05	3172	9	2.26E-03	21.6	
61	0	1592.98	38	72	2.91	3185.94	3181	13	1.25E-03	50.0	
62	0	1620.12*	55	35	2.16	3240.26	3233	14	1.82E-03	30.7	
63	0	1626.82	20	42	0.49	3253.66	3247	11	6.57E-04	67.2	
64	0	1630.84	35	48	3.00	3261.71	3257	13	1.16E-03	43.7	
65	0	1712.77	25	24	3.14	3425.67	3419	12	8.36E-04	43.9	
66	0	1729.90*	40	56	3.21	3459.94	3451	19	1.32E-03	63.9	
67	0	1764.70*	248	45	2.88	3529.57	3521	24	8.26E-03	11.5	
68	0	1776.09	11	22	2.21	3552.38	3544	10	3.80E-04	82.8	
69	0	1801.35	24	50	3.83	3602.93	3593	19	7.86E-04	76.1	
70	0	1827.74	20	10	0.74	3655.74	3649	11	6.51E-04	39.7	
71	0	1847.12	54	36	2.53	3694.53	3686	16	1.80E-03	28.3	
72	0	1879.95	22	37	4.43	3760.24	3752	16	7.47E-04	63.6	
73	0	1994.58	36	25	2.98	3989.65	3979	20	1.21E-03	37.6	
74	0	2014.41	17	17	3.29	4029.36	4021	13	5.60E-04	58.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701018       *
* Acquisition date : 13-DEC-2007 16:42:20 Detector SN#    :                 *
* Detector ID      : GAMAN                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:06.39     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701018           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.1274E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 26-MAR-2007 16:23:53 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	8.504E+00	7.811E-01	2.979E-01	0.000E+00
CS-137	1.467E-02	2.492E-02	3.361E-02	0.000E+00
EU-155	1.044E-01	7.733E-02	1.043E-01	0.000E+00
TL-208	4.331E-01	5.905E-02	3.151E-02	0.000E+00
BI-212	7.908E-01	2.652E-01	2.536E-01	0.000E+00
PB-212	1.450E+00	1.177E-01	5.717E-02	0.000E+00
BI-214	9.280E-01	1.148E-01	6.398E-02	0.000E+00
PB-214	1.081E+00	1.085E-01	6.506E-02	0.000E+00
RA-223	5.748E-01	1.692E-01	1.832E-01	0.000E+00
AC-228	1.416E+00	2.182E-01	1.149E-01	0.000E+00
PA-234M	4.234E+00	3.379E+00	3.549E+00	0.000E+00
TH-234	1.024E+00	4.697E-01	4.244E-01	0.000E+00
U-235	5.808E-02	1.687E-01	2.077E-01	0.000E+00
NP-237	9.068E-01	1.925E-01	1.916E-01	0.000E+00
AM-243	3.023E-01	4.885E-02	4.406E-02	0.000E+00
CM-243	9.393E-02	6.958E-02	9.299E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	-7.183E-03	2.058E-02	3.349E-02	0.000E+00	NOT IDENT.
RH-101	-5.183E-03	2.359E-02	3.540E-02	0.000E+00	NOT IDENT.
SB-125	2.254E-02	5.286E-02	9.135E-02	0.000E+00	NOT IDENT.
PO-209	1.511E+00	3.813E+00	6.593E+00	0.000E+00	NOT IDENT.
BI-211	-1.348E-01	5.669E-01	9.567E-01	0.000E+00	NOT IDENT.
PA-233	1.367E-02	3.622E-02	6.348E-02	0.000E+00	NOT IDENT.
NP-236	4.105E-02	3.741E-02	5.879E-02	0.000E+00	NOT IDENT.
NP-239	-7.968E-02	1.382E-01	2.271E-01	0.000E+00	NOT IDENT.
AM-241	4.544E-02	6.938E-02	1.101E-01	0.000E+00	NOT IDENT.
AM-246	2.130E-02	7.009E-02	1.193E-01	0.000E+00	NOT IDENT.
CF-249	3.279E-02	2.289E-02	4.082E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 01:03:02.04

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701018.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 16:42:20
Sample ID        : G198701018           Sample quantity  : 1.12740E+02 GRAM
Detector name    : GAMAN                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:06.39  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	1263	10.66*	1.113E+00	8.504E+00	8.504E+00	9.37
CS-137	661.66	32	85.10*	2.082E+00	1.460E-02	1.467E-02	173.31
EU-155	105.31	149	21.20*	5.551E+00	1.014E-01	1.044E-01	75.58
TL-208	277.36	136	6.31	3.797E+00	4.551E-01	4.551E-01	82.97
	510.77	269	22.60	2.523E+00	3.775E-01	3.775E-01	59.26
	583.19	1049	84.50*	2.291E+00	4.331E-01	4.331E-01	13.91
	763.13	------	1.81	1.863E+00	------	Line Not Found	------
	860.56	172	12.42	1.692E+00	6.555E-01	6.555E-01	45.04
BI-212	727.33	226	11.80*	1.936E+00	7.908E-01	7.908E-01	34.22
	785.37	88	1.10	1.820E+00	3.503E+00	3.503E+00	62.85
	1620.50	55	1.49	1.039E+00	2.821E+00	2.821E+00	61.72
PB-212	74.81	1168	10.40	4.529E+00	1.982E+00	1.982E+00	16.49
	77.11	1531	17.50	4.680E+00	1.493E+00	1.493E+00	12.93
	87.30	728	7.81	5.176E+00	1.440E+00	1.440E+00	21.66
	238.63	3278	43.30*	4.171E+00	1.450E+00	1.450E+00	8.28
	300.09	161	3.28	3.616E+00	1.086E+00	1.086E+00	62.05
BI-214	609.31	1187	46.10*	2.217E+00	9.279E-01	9.280E-01	12.63
	768.36	91	4.94	1.854E+00	7.978E-01	7.978E-01	74.32
	806.17	------	1.22	1.784E+00	------	Line Not Found	------
	934.06	52	3.03	1.583E+00	8.585E-01	8.586E-01	79.51
	1120.29	297	15.10	1.365E+00	1.152E+00	1.152E+00	28.24
	1155.19	46	1.63	1.332E+00	1.686E+00	1.686E+00	90.98
	1238.11	119	5.79	1.261E+00	1.304E+00	1.304E+00	58.17
	1280.96	------	1.43	1.228E+00	------	Line Not Found	------
	1377.67	50	4.00	1.161E+00	8.588E-01	8.589E-01	85.91
	1401.50	------	1.27	1.147E+00	------	Line Not Found	------
	1407.98	59	2.15	1.143E+00	1.907E+00	1.907E+00	59.19
	1509.23	68	2.11	1.088E+00	2.358E+00	2.358E+00	53.06
	1729.60	40	2.92	9.998E-01	1.084E+00	1.084E+00	127.90
	1764.49	248	15.40	9.891E-01	1.299E+00	1.299E+00	23.77
PB-214	74.81	1168	6.44	4.529E+00	3.201E+00	3.201E+00	16.49
	77.11	1531	10.80	4.680E+00	2.420E+00	2.420E+00	12.93

Sample ID : G198701018 Acquisition date : 13-DEC-2007 16:42:20

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	728	4.84	5.176E+00	2.323E+00	2.324E+00	21.66
	242.00	800	7.43	4.142E+00	2.078E+00	2.078E+00	18.41
	295.22	992	19.30	3.655E+00	1.124E+00	1.124E+00	14.34
	351.93	1657	37.60*	3.260E+00	1.081E+00	1.081E+00	10.25
RA-223	269.46	381	13.70*	3.866E+00	5.748E-01	5.748E-01	30.05
AC-228	129.07	162	2.42	5.511E+00	9.708E-01	9.708E-01	87.38
	209.25	251	3.89	4.501E+00	1.147E+00	1.147E+00	50.09
	270.25	381	3.46	3.866E+00	2.276E+00	2.276E+00	30.05
	338.32	694	11.27	3.346E+00	1.470E+00	1.470E+00	19.38
	409.46	73	1.92	2.941E+00	1.026E+00	1.026E+00	120.20
	463.00	189	4.40	2.704E+00	1.266E+00	1.266E+00	46.84
	794.95	145	4.25	1.804E+00	1.509E+00	1.509E+00	43.01
	911.20	739	25.80*	1.616E+00	1.416E+00	1.416E+00	15.72
	964.77	119	4.99	1.542E+00	1.232E+00	1.232E+00	62.09
	968.97	457	15.80	1.537E+00	1.505E+00	1.505E+00	16.67
	1588.20	68	3.22	1.052E+00	1.600E+00	1.600E+00	43.66
PA-234M	1001.03	67	0.84*	1.497E+00	4.234E+00	4.234E+00	81.43
TH-234	63.29	168	4.80	3.520E+00	7.924E-01	7.924E-01	100.06
	92.58	370	5.41*	5.346E+00	1.024E+00	1.024E+00	46.83
U-235	143.76	43	10.96*	5.354E+00	5.808E-02	5.808E-02	296.35
NP-237	86.48	728	12.40*	5.176E+00	9.068E-01	9.068E-01	21.66
AM-243	74.66	1168	68.20*	4.529E+00	3.023E-01	3.023E-01	16.49
CM-243	103.76	149	23.00*	5.551E+00	9.345E-02	9.393E-02	75.58

Flag: "*" = Keyline

Sample ID : G198701018 Acquisition date : 13-DEC-2007 16:42:20

Total number of lines in spectrum 74
Number of unidentified lines 30
Number of lines tentatively identified by NID 44 59.46%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	8.504E+00	8.504E+00	0.797E+00	9.37	
CS-137	9.47E+08S	1.00	1.460E-02	1.467E-02	2.543E-02	173.31	
EU-155	1.57E+08S	1.03	1.014E-01	1.044E-01	0.789E-01	75.58	
TL-208	4.43E+17S	1.00	4.331E-01	4.331E-01	0.603E-01	13.91	
BI-212	4.43E+17S	1.00	7.908E-01	7.908E-01	2.706E-01	34.22	
PB-212	4.43E+17S	1.00	1.450E+00	1.450E+00	0.120E+00	8.28	
BI-214	5.05E+10S	1.00	9.279E-01	9.280E-01	1.172E-01	12.63	
PB-214	5.05E+10S	1.00	1.081E+00	1.081E+00	0.111E+00	10.25	
RA-223	1.04E+12S	1.00	5.748E-01	5.748E-01	1.727E-01	30.05	
AC-228	4.43E+17S	1.00	1.416E+00	1.416E+00	0.223E+00	15.72	
PA-234M	1.41E+17S	1.00	4.234E+00	4.234E+00	3.447E+00	81.43	
TH-234	1.41E+17S	1.00	1.024E+00	1.024E+00	0.479E+00	46.83	
U-235	2.22E+16S	1.00	5.808E-02	5.808E-02	17.21E-02	296.35	
NP-237	6.75E+13S	1.00	9.068E-01	9.068E-01	1.965E-01	21.66	
AM-243	2.33E+11S	1.00	3.023E-01	3.023E-01	0.498E-01	16.49	
CM-243	8.99E+08S	1.01	9.345E-02	9.393E-02	7.100E-02	75.58	
			---	---			
	Total Activity :		2.191E+01	2.192E+01			

Grand Total Activity : 2.191E+01 2.192E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701018 Acquisition date : 13-DEC-2007 16:42:20

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	32.73	76	873	1.26	65.44	64	6	2.55E-03	****	2.10E-01	
2	84.45	218	1484	1.49	168.82	163	29	7.25E-03	67.7	5.06E+00	
2	90.00	493	1180	1.32	179.93	163	29	1.64E-02	26.4	5.27E+00	
0	154.55	46	1014	1.01	308.95	306	8	1.54E-03	****	5.22E+00	
0	185.80	504	1188	1.42	371.44	365	11	1.68E-02	32.6	4.80E+00	
0	259.15	50	671	0.60	518.08	512	9	1.67E-03	****	3.97E+00	
0	328.48	207	685	2.39	656.69	651	12	6.91E-03	52.4	3.41E+00	
0	562.75	50	239	2.11	1125.14	1121	9	1.65E-03	****	2.35E+00	
0	717.29	40	235	0.67	1434.17	1431	12	1.34E-03	****	1.96E+00	
0	771.85	55	161	0.91	1543.28	1540	9	1.84E-03	86.8	1.85E+00	
0	983.02	20	116	1.45	1965.64	1959	11	6.50E-04	****	1.52E+00	
0	1032.82	46	72	2.43	2065.25	2061	9	1.52E-03	73.3	1.46E+00	
1	1049.89	49	91	2.19	2099.40	2095	16	1.64E-03	72.5	1.44E+00	
1	1052.69	41	124	1.99	2105.00	2095	16	1.35E-03	****	1.44E+00	
0	1063.51	47	114	1.34	2126.65	2121	12	1.57E-03	95.4	1.42E+00	
0	1250.17	31	90	1.36	2500.05	2492	12	1.03E-03	****	1.25E+00	
0	1368.06	20	107	0.68	2735.92	2726	18	6.72E-04	****	1.17E+00	
0	1497.19	36	91	6.67	2994.27	2980	19	1.21E-03	****	1.09E+00	
3	1513.25	46	24	2.93	3026.42	3012	21	1.55E-03	59.3	1.09E+00	
0	1592.98	38	72	2.91	3185.94	3181	13	1.25E-03	99.9	1.05E+00	
0	1626.82	20	42	0.49	3253.66	3247	11	6.57E-04	****	1.04E+00	
0	1630.84	35	48	3.00	3261.71	3257	13	1.16E-03	87.4	1.03E+00	
0	1712.77	25	24	3.14	3425.67	3419	12	8.36E-04	87.7	1.01E+00	
0	1776.09	11	22	2.21	3552.38	3544	10	3.80E-04	****	9.86E-01	
0	1801.35	24	50	3.83	3602.93	3593	19	7.86E-04	****	9.79E-01	
0	1827.74	20	10	0.74	3655.74	3649	11	6.51E-04	79.5	9.72E-01	
0	1847.12	54	36	2.53	3694.53	3686	16	1.80E-03	56.6	9.67E-01	
0	1879.95	22	37	4.43	3760.24	3752	16	7.47E-04	****	9.59E-01	
0	1994.58	36	25	2.98	3989.65	3979	20	1.21E-03	75.1	9.37E-01	
0	2014.41	17	17	3.29	4029.36	4021	13	5.60E-04	****	9.33E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701018            *
* Acquisition date : 13-DEC-2007 16:42:20 Detector SN#    :                 *
* Detector ID      : GAMAN                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:06.39     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701018           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.1274E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 26-MAR-2007 16:23:53 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	8.504E+00	7.811E-01	1.490E-01	7.811E-01
CS-137	1.467E-02	2.492E-02	1.682E-02	2.492E-02
EU-155	1.044E-01	7.733E-02	5.220E-02	7.733E-02
TL-208	4.331E-01	5.905E-02	1.576E-02	5.905E-02
BI-212	7.908E-01	2.652E-01	1.269E-01	2.652E-01
PB-212	1.450E+00	1.177E-01	2.860E-02	1.177E-01
BI-214	9.280E-01	1.148E-01	3.201E-02	1.148E-01
PB-214	1.081E+00	1.085E-01	3.255E-02	1.085E-01
RA-223	5.748E-01	1.692E-01	9.165E-02	1.692E-01
AC-228	1.416E+00	2.182E-01	5.750E-02	2.182E-01
PA-234M	4.234E+00	3.379E+00	1.776E+00	3.379E+00
TH-234	1.024E+00	4.697E-01	2.123E-01	4.697E-01
U-235	5.808E-02	1.687E-01	1.039E-01	1.687E-01
NP-237	9.068E-01	1.925E-01	9.584E-02	1.925E-01
AM-243	3.023E-01	4.885E-02	2.204E-02	4.885E-02
CM-243	9.393E-02	6.958E-02	4.652E-02	6.958E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-7.183E-03	2.058E-02	1.676E-02	2.058E-02	NOT IDENT.
RH-101	-5.183E-03	2.359E-02	1.771E-02	2.359E-02	NOT IDENT.
SB-125	2.254E-02	5.286E-02	4.570E-02	5.286E-02	NOT IDENT.
PO-209	1.511E+00	3.813E+00	3.298E+00	3.813E+00	NOT IDENT.
BI-211	-1.348E-01	5.669E-01	4.786E-01	5.669E-01	NOT IDENT.
PA-233	1.367E-02	3.622E-02	3.176E-02	3.622E-02	NOT IDENT.
NP-236	4.105E-02	3.741E-02	2.941E-02	3.741E-02	NOT IDENT.
NP-239	-7.968E-02	1.382E-01	1.136E-01	1.382E-01	NOT IDENT.
AM-241	4.544E-02	6.938E-02	5.511E-02	6.938E-02	NOT IDENT.
AM-246	2.130E-02	7.009E-02	5.967E-02	7.009E-02	NOT IDENT.
CF-249	3.279E-02	2.289E-02	2.042E-02	2.289E-02	NOT IDENT.

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	971.6915
63.29	1154.1560
74.66	1276.5854
74.81	1276.8862
74.81	1276.8862
77.11	1281.4409
77.11	1281.4409
86.48	1040.9421
87.30	1042.1599
87.30	1042.1599
92.58	1049.8579
98.44	935.0779
103.76	970.2589
105.31	993.7477
129.07	1032.7472
143.76	1046.1423
198.00	895.2963
209.25	866.8866
228.18	822.3292
238.63	755.8042
242.00	687.0768
269.46	670.6730
270.25	657.6423
277.36	626.5975
295.22	575.0168
300.09	542.7665
312.17	508.0676
338.32	535.3239
351.93	453.6056
387.59	401.3043
409.46	442.0914
427.87	366.3730
463.00	330.8703
510.77	347.7154
583.19	267.6870
609.31	307.8588
661.66	253.4415
727.33	242.2916
763.13	192.1069
768.36	186.9336
785.37	196.2424
794.95	193.1396
806.17	196.5977
831.80	228.0600
860.56	182.8933
896.60	171.4819
911.20	166.4597
934.06	160.7892
964.77	150.4968
968.97	150.6703
1001.03	144.5401
1078.86	148.0181
1120.29	126.2919
1155.19	143.6506
1173.23	145.2819
1238.11	137.0703
1280.96	114.2602
1332.51	100.6940
1377.67	89.8755
1401.50	77.4141
1407.98	100.1218
1460.80	91.3931
1509.23	64.9546
1588.20	91.9598
1620.50	40.3652
1729.60	58.7863
1764.49	46.5694

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701018

Total Uranium Activity	2.6875E-02	ug/g
Total Uranium Counting Unc.	7.8052E-02	ug/g
Total Uranium Tpu	7.8052E-08	ug/g
Total Uranium Mda	4.8089E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:28:03.87

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701019.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 01:07:23
Sample ID        : G198701019           Sample quantity  : 1.18800E+02 GRAM
Detector name    : GAMAN                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:05.77  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.62	44	640	1.19	107.20	105	6	1.46E-03	92.5	
2	0	63.33*	77	1043	1.14	126.60	123	8	2.57E-03	84.8	
3	1	74.91*	679	1119	1.33	149.76	142	18	2.26E-02	10.6	3.16E+00
4	1	77.16*	1146	908	1.17	154.24	142	18	3.82E-02	6.1	
5	2	84.51*	165	1043	1.26	168.94	165	27	5.51E-03	38.0	2.96E+00
6	2	87.29	463	1022	1.25	174.50	165	27	1.54E-02	12.9	
7	2	89.93	284	752	1.00	179.78	165	27	9.45E-03	16.4	
8	2	92.72*	231	857	1.23	185.36	165	27	7.69E-03	33.5	
9	0	99.31	172	945	2.56	198.54	194	9	5.74E-03	33.1	
10	0	105.92	55	629	1.29	211.74	209	6	1.82E-03	74.0	
11	0	108.60	57	607	0.66	217.09	215	6	1.91E-03	69.2	
12	0	129.50	256	1239	0.91	258.89	253	12	8.54E-03	28.2	
13	0	143.60*	71	1307	2.38	287.06	283	13	2.36E-03	112.8	
14	0	155.09	88	1751	2.92	310.05	295	17	2.95E-03	109.0	
15	0	158.99	91	1088	1.61	317.84	313	11	3.03E-03	71.2	
16	0	185.85*	335	875	1.38	371.54	367	10	1.12E-02	21.5	
17	0	198.32*	27	684	1.71	396.46	393	8	8.98E-04	192.0	
18	2	205.14*	55	731	1.30	410.10	406	19	1.84E-03	93.1	1.98E+00
19	2	209.38	251	834	1.64	418.57	406	19	8.37E-03	22.8	
20	3	238.59*	2405	543	1.32	476.98	469	33	8.02E-02	3.3	1.28E+00
21	3	241.61	631	693	1.86	483.01	469	33	2.10E-02	11.5	
22	0	269.96	133	593	0.97	539.69	536	9	4.43E-03	34.1	
23	0	277.78	153	676	1.67	555.32	549	12	5.11E-03	34.9	
24	0	295.26*	691	521	1.41	590.27	586	10	2.30E-02	7.9	
25	0	300.11*	110	531	1.13	599.96	596	10	3.67E-03	44.8	
26	0	327.91	247	586	0.90	655.55	649	14	8.22E-03	21.8	
27	0	338.11*	440	537	1.52	675.96	671	11	1.47E-02	12.3	
28	0	351.84*	1038	449	1.41	703.40	698	10	3.46E-02	5.5	
29	0	411.67	173	645	6.47	823.03	814	21	5.76E-03	37.6	
30	0	463.24	174	293	1.59	926.14	921	11	5.79E-03	20.6	
31	0	476.89	42	191	2.62	953.45	951	8	1.39E-03	57.7	
32	0	498.09	70	329	5.04	995.83	988	14	2.34E-03	56.0	
33	0	510.80*	228	569	2.17	1021.25	1014	19	7.61E-03	33.1	
34	0	560.67	9	222	0.58	1120.98	1118	10	2.94E-04	319.3	
35	0	583.04*	808	275	1.42	1165.70	1158	14	2.69E-02	6.3	
36	0	592.37	59	136	2.49	1184.35	1181	8	1.97E-03	36.4	
37	0	609.10*	883	273	1.77	1217.81	1211	13	2.94E-02	5.9	
38	0	726.89*	133	202	1.58	1453.38	1448	11	4.43E-03	27.0	

Sample ID : G198701019 Acquisition date : 14-DEC-2007 01:07:23

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	735.69	24	216	2.76	1470.96	1461	13	7.90E-04	130.6	
40	0	769.64	118	353	4.06	1538.86	1529	20	3.94E-03	40.1	
41	0	785.94	39	136	0.72	1571.46	1568	9	1.29E-03	57.2	
42	0	795.26	69	250	0.80	1590.11	1582	13	2.29E-03	48.9	
43	0	860.23	127	159	1.56	1720.04	1714	13	4.23E-03	22.3	
44	0	910.95*	513	153	1.83	1821.50	1815	14	1.71E-02	7.7	
45	0	933.68*	2	147	1.19	1866.96	1860	14	8.22E-05	*****	
46	2	964.29*	58	133	2.23	1928.18	1921	34	1.94E-03	62.2	1.28E+00
47	2	968.88	354	106	1.85	1937.36	1921	34	1.18E-02	7.8	
48	0	982.70	34	113	1.76	1965.02	1956	12	1.13E-03	65.0	
49	0	1011.39	92	329	15.73	2022.40	1996	37	3.08E-03	66.3	
50	0	1029.83	23	132	4.87	2059.29	2048	16	7.65E-04	113.9	
51	0	1078.18	18	83	1.28	2155.99	2153	9	6.01E-04	93.3	
52	0	1120.31*	134	125	1.82	2240.27	2234	12	4.45E-03	24.3	
53	0	1193.47	19	70	1.68	2386.62	2380	9	6.23E-04	87.3	
54	0	1198.10	41	90	3.42	2395.88	2389	15	1.36E-03	53.2	
55	0	1231.82	40	67	1.37	2463.34	2458	11	1.33E-03	43.2	
56	0	1237.78	88	115	2.49	2475.27	2469	15	2.94E-03	28.3	
57	0	1381.47	136	115	8.73	2762.74	2747	31	4.54E-03	24.9	
58	0	1460.68*	591	134	2.35	2921.23	2913	20	1.97E-02	6.8	
59	0	1486.61	18	70	2.21	2973.11	2964	16	5.93E-04	109.0	
60	0	1491.17	7	21	0.78	2982.23	2979	6	2.24E-04	112.7	
61	0	1511.85	27	95	5.31	3023.61	3009	20	8.98E-04	90.7	
62	0	1518.69	18	62	5.38	3037.29	3029	15	6.10E-04	97.5	
63	0	1620.95*	22	35	1.31	3241.91	3236	11	7.20E-04	69.4	
64	0	1630.94	31	34	0.85	3261.91	3256	12	1.04E-03	42.0	
65	0	1663.23	18	43	0.92	3326.52	3319	11	6.03E-04	74.5	
66	0	1702.27	30	44	6.33	3404.65	3394	18	1.02E-03	54.6	
67	0	1711.09	34	38	6.19	3422.29	3411	17	1.12E-03	45.4	
68	3	1764.22*	150	22	2.90	3528.61	3517	31	5.00E-03	15.0	1.56E+00
69	3	1769.91	24	15	2.30	3540.00	3517	31	8.08E-04	45.1	
70	0	1796.70	13	36	3.94	3593.62	3584	17	4.18E-04	111.0	
71	0	1808.35	21	57	3.76	3616.93	3603	19	7.07E-04	88.0	
72	0	1822.96	17	72	1.02	3646.18	3633	26	5.59E-04	140.3	
73	0	1848.25	57	43	5.80	3696.79	3685	25	1.89E-03	34.0	
74	0	1992.18	21	37	0.50	3984.86	3975	19	7.01E-04	73.4	
75	0	2013.35	25	6	4.12	4027.23	4021	13	8.44E-04	28.5	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701019       *
* Acquisition date : 14-DEC-2007 01:07:23 Detector SN#    :                 *
* Detector ID      : GAMAN                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:05.77     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701019           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.1880E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 26-MAR-2007 16:23:53 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.778E+00	5.521E-01	2.744E-01	0.000E+00
RH-101	6.304E-03	2.373E-02	3.041E-02	0.000E+00
EU-155	3.620E-02	5.260E-02	9.263E-02	0.000E+00
TL-208	3.167E-01	4.534E-02	2.843E-02	0.000E+00
BI-212	4.414E-01	2.364E-01	2.343E-01	0.000E+00
PB-212	1.010E+00	9.062E-02	4.933E-02	0.000E+00
BI-214	6.549E-01	9.051E-02	5.375E-02	0.000E+00
PB-214	6.420E-01	7.902E-02	6.022E-02	0.000E+00
RA-223	1.901E-01	1.275E-01	1.533E-01	0.000E+00
AC-228	9.337E-01	1.689E-01	9.955E-02	0.000E+00
TH-234	6.047E-01	4.002E-01	4.032E-01	0.000E+00
U-235	9.147E-02	2.023E-01	1.819E-01	0.000E+00
NP-236	6.271E-02	4.094E-02	5.407E-02	0.000E+00
NP-237	5.475E-01	1.454E-01	1.820E-01	0.000E+00
AM-243	1.667E-01	3.688E-02	3.838E-02	0.000E+00
AM-246	3.494E-02	6.395E-02	9.543E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	4.282E-03	1.757E-02	2.977E-02	0.000E+00	NOT IDENT.
SB-125	1.711E-03	4.753E-02	8.152E-02	0.000E+00	NOT IDENT.
CS-137	2.695E-03	2.209E-02	3.176E-02	0.000E+00	NOT IDENT.
PO-209	4.025E-01	3.308E+00	5.669E+00	0.000E+00	NOT IDENT.
BI-211	-2.852E-01	4.895E-01	8.127E-01	0.000E+00	NOT IDENT.
PA-233	-2.070E-02	3.251E-02	5.562E-02	0.000E+00	NOT IDENT.
PA-234M	9.184E-01	2.542E+00	3.664E+00	0.000E+00	NOT IDENT.
NP-239	-3.802E-02	1.205E-01	2.007E-01	0.000E+00	NOT IDENT.
AM-241	6.800E-02	6.194E-02	1.005E-01	0.000E+00	NOT IDENT.
CM-243	3.644E-02	7.371E-02	8.448E-02	0.000E+00	NOT IDENT.
CF-249	-1.924E-03	2.034E-02	3.495E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:28:05.10

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701019.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 01:07:23
Sample ID        : G198701019           Sample quantity  : 1.18800E+02 GRAM
Detector name    : GAMAN                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:05.77  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	591	10.66*	1.113E+00	3.778E+00	3.778E+00	14.91
RH-101	198.00	27	73.00*	4.639E+00	6.030E-03	6.304E-03	384.09
EU-155	105.31	55	21.20*	5.555E+00	3.515E-02	3.620E-02	148.26
TL-208	277.36	153	6.31	3.798E+00	4.852E-01	4.852E-01	70.19
	510.77	228	22.60	2.523E+00	3.037E-01	3.037E-01	66.61
	583.19	808	84.50*	2.291E+00	3.167E-01	3.167E-01	14.61
	763.13	------	1.81	1.863E+00	------	Line Not Found	------
	860.56	127	12.42	1.693E+00	4.581E-01	4.581E-01	45.74
BI-212	727.33	133	11.80*	1.936E+00	4.414E-01	4.414E-01	54.65
	785.37	39	1.10	1.820E+00	1.463E+00	1.463E+00	114.81
	1620.50	22	1.49	1.039E+00	1.058E+00	1.058E+00	138.96
PB-212	74.81	679	10.40	4.528E+00	1.093E+00	1.093E+00	22.57
	77.11	1146	17.50	4.676E+00	1.062E+00	1.062E+00	14.60
	87.30	463	7.81	5.175E+00	8.693E-01	8.693E-01	27.10
	238.63	2405	43.30*	4.172E+00	1.010E+00	1.010E+00	9.16
	300.09	110	3.28	3.616E+00	7.043E-01	7.043E-01	89.88
BI-214	609.31	883	46.10*	2.218E+00	6.548E-01	6.549E-01	14.10
	768.36	118	4.94	1.851E+00	9.813E-01	9.814E-01	80.62
	806.17	------	1.22	1.784E+00	------	Line Not Found	------
	934.06	2	3.03	1.584E+00	3.898E-02	3.898E-02	2439.19
	1120.29	134	15.10	1.365E+00	4.914E-01	4.915E-01	49.15
	1155.19	------	1.63	1.332E+00	------	Line Not Found	------
	1238.11	88	5.79	1.261E+00	9.169E-01	9.170E-01	56.98
	1280.96	------	1.43	1.228E+00	------	Line Not Found	------
	1377.67	------	4.00	1.162E+00	------	Line Not Found	------
	1401.50	------	1.27	1.147E+00	------	Line Not Found	------
	1407.98	------	2.15	1.143E+00	------	Line Not Found	------
	1509.23	------	2.11	1.088E+00	------	Line Not Found	------
	1729.60	------	2.92	9.999E-01	------	Line Not Found	------
	1764.49	150	15.40	9.892E-01	7.462E-01	7.462E-01	30.66
PB-214	74.81	679	6.44	4.528E+00	1.766E+00	1.766E+00	22.57
	77.11	1146	10.80	4.676E+00	1.720E+00	1.720E+00	14.60

Sample ID : G198701019 Acquisition date : 14-DEC-2007 01:07:23

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	463	4.84	5.175E+00	1.403E+00	1.403E+00	27.10
	242.00	631	7.43	4.140E+00	1.555E+00	1.555E+00	23.91
	295.22	691	19.30	3.654E+00	7.434E-01	7.434E-01	17.06
	351.93	1038	37.60*	3.260E+00	6.420E-01	6.420E-01	12.56
RA-223	269.46	133	13.70*	3.867E+00	1.901E-01	1.901E-01	68.44
AC-228	129.07	256	2.42	5.507E+00	1.457E+00	1.457E+00	56.81
	209.25	251	3.89	4.502E+00	1.087E+00	1.087E+00	46.06
	270.25	133	3.46	3.867E+00	7.528E-01	7.528E-01	68.44
	338.32	440	11.27	3.347E+00	8.848E-01	8.848E-01	25.33
	409.46	------	1.92	2.944E+00	------	Line Not Found	------
	463.00	174	4.40	2.704E+00	1.106E+00	1.106E+00	41.78
	794.95	69	4.25	1.803E+00	6.806E-01	6.806E-01	98.29
	911.20	513	25.80*	1.616E+00	9.337E-01	9.337E-01	18.46
	964.77	58	4.99	1.543E+00	5.724E-01	5.724E-01	124.87
	968.97	354	15.80	1.537E+00	1.106E+00	1.106E+00	18.24
	1588.20	------	3.22	1.052E+00	------	Line Not Found	------
TH-234	63.29	77	4.80	3.513E+00	3.472E-01	3.472E-01	169.71
	92.58	231	5.41*	5.346E+00	6.047E-01	6.047E-01	67.52
U-235	143.76	71	10.96*	5.360E+00	9.147E-02	9.147E-02	225.66
NP-236	98.44	172	38.00*	5.481E+00	6.271E-02	6.271E-02	66.61
NP-237	86.48	463	12.40*	5.175E+00	5.475E-01	5.475E-01	27.10
AM-243	74.66	679	68.20*	4.528E+00	1.667E-01	1.667E-01	22.57
AM-246	1078.86	18	27.80*	1.408E+00	3.494E-02	3.494E-02	186.76

Flag: "*" = Keyline

Sample ID : G198701019 Acquisition date : 14-DEC-2007 01:07:23

Total number of lines in spectrum 75
Number of unidentified lines 37
Number of lines tentatively identified by NID 38 50.67%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.778E+00	3.778E+00	0.563E+00	14.91	
RH-101	1.04E+08S	1.05	6.030E-03	6.304E-03	24.22E-03	384.09	
EU-155	1.57E+08S	1.03	3.515E-02	3.620E-02	5.367E-02	148.26	
TL-208	4.43E+17S	1.00	3.167E-01	3.167E-01	0.463E-01	14.61	
BI-212	4.43E+17S	1.00	4.414E-01	4.414E-01	2.412E-01	54.65	
PB-212	4.43E+17S	1.00	1.010E+00	1.010E+00	0.092E+00	9.16	
BI-214	5.05E+10S	1.00	6.548E-01	6.549E-01	0.924E-01	14.10	
PB-214	5.05E+10S	1.00	6.420E-01	6.420E-01	0.806E-01	12.56	
RA-223	1.04E+12S	1.00	1.901E-01	1.901E-01	1.301E-01	68.44	
AC-228	4.43E+17S	1.00	9.337E-01	9.337E-01	1.724E-01	18.46	
TH-234	1.41E+17S	1.00	6.047E-01	6.047E-01	4.083E-01	67.52	
U-235	2.22E+16S	1.00	9.147E-02	9.147E-02	20.64E-02	225.66	
NP-236	4.89E+12S	1.00	6.271E-02	6.271E-02	4.177E-02	66.61	
NP-237	6.75E+13S	1.00	5.475E-01	5.475E-01	1.484E-01	27.10	
AM-243	2.33E+11S	1.00	1.667E-01	1.667E-01	0.376E-01	22.57	
AM-246	2.18E+11S	1.00	3.494E-02	3.494E-02	6.526E-02	186.76	
		Total Activity :	9.516E+00	9.517E+00			

Grand Total Activity : 9.516E+00 9.517E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701019 Acquisition date : 14-DEC-2007 01:07:23

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.62	44	640	1.19	107.20	105	6	1.46E-03	****	2.37E+00	
2	84.51	165	1043	1.26	168.94	165	27	5.51E-03	75.9	5.06E+00	
2	89.93	284	752	1.00	179.78	165	27	9.45E-03	32.8	5.27E+00	
0	108.60	57	607	0.66	217.09	215	6	1.91E-03	****	5.57E+00	
0	155.09	88	1751	2.92	310.05	295	17	2.95E-03	****	5.21E+00	
0	158.99	91	1088	1.61	317.84	313	11	3.03E-03	****	5.16E+00	
0	185.85	335	875	1.38	371.54	367	10	1.12E-02	43.0	4.80E+00	
2	205.14	55	731	1.30	410.10	406	19	1.84E-03	****	4.55E+00	
0	327.91	247	586	0.90	655.55	649	14	8.22E-03	43.6	3.41E+00	
0	411.67	173	645	6.47	823.03	814	21	5.76E-03	75.3	2.93E+00	
0	476.89	42	191	2.62	953.45	951	8	1.39E-03	****	2.65E+00	
0	498.09	70	329	5.04	995.83	988	14	2.34E-03	****	2.57E+00	
0	560.67	9	222	0.58	1120.98	1118	10	2.94E-04	****	2.36E+00	
0	592.37	59	136	2.49	1184.35	1181	8	1.97E-03	72.8	2.26E+00	
0	735.69	24	216	2.76	1470.96	1461	13	7.90E-04	****	1.92E+00	
0	982.70	34	113	1.76	1965.02	1956	12	1.13E-03	****	1.52E+00	
0	1011.39	92	329	15.73	2022.40	1996	37	3.08E-03	****	1.48E+00	
0	1029.83	23	132	4.87	2059.29	2048	16	7.65E-04	****	1.46E+00	
0	1193.47	19	70	1.68	2386.62	2380	9	6.23E-04	****	1.30E+00	
0	1198.10	41	90	3.42	2395.88	2389	15	1.36E-03	****	1.29E+00	
0	1231.82	40	67	1.37	2463.34	2458	11	1.33E-03	86.4	1.27E+00	
0	1381.47	136	115	8.73	2762.74	2747	31	4.54E-03	49.8	1.16E+00	
0	1486.61	18	70	2.21	2973.11	2964	16	5.93E-04	****	1.10E+00	
0	1491.17	7	21	0.78	2982.23	2979	6	2.24E-04	****	1.10E+00	
0	1511.85	27	95	5.31	3023.61	3009	20	8.98E-04	****	1.09E+00	
0	1518.69	18	62	5.38	3037.29	3029	15	6.10E-04	****	1.08E+00	
0	1630.94	31	34	0.85	3261.91	3256	12	1.04E-03	84.0	1.03E+00	
0	1663.23	18	43	0.92	3326.52	3319	11	6.03E-04	****	1.02E+00	
0	1702.27	30	44	6.33	3404.65	3394	18	1.02E-03	****	1.01E+00	
0	1711.09	34	38	6.19	3422.29	3411	17	1.12E-03	90.9	1.01E+00	
3	1769.91	24	15	2.30	3540.00	3517	31	8.08E-04	90.1	9.88E-01	
0	1796.70	13	36	3.94	3593.62	3584	17	4.18E-04	****	9.80E-01	
0	1808.35	21	57	3.76	3616.93	3603	19	7.07E-04	****	9.77E-01	
0	1822.96	17	72	1.02	3646.18	3633	26	5.59E-04	****	9.73E-01	
0	1848.25	57	43	5.80	3696.79	3685	25	1.89E-03	68.0	9.66E-01	
0	1992.18	21	37	0.50	3984.86	3975	19	7.01E-04	****	9.37E-01	
0	2013.35	25	6	4.12	4027.23	4021	13	8.44E-04	57.0	9.34E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701019            *
* Acquisition date : 14-DEC-2007 01:07:23 Detector SN#    :                 *
* Detector ID      : GAMAN                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:05.77     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701019           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.1880E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 26-MAR-2007 16:23:53 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.778E+00	5.521E-01	1.373E-01	5.521E-01
RH-101	6.304E-03	2.373E-02	1.522E-02	2.373E-02
EU-155	3.620E-02	5.260E-02	4.634E-02	5.260E-02
TL-208	3.167E-01	4.534E-02	1.423E-02	4.534E-02
BI-212	4.414E-01	2.364E-01	1.172E-01	2.364E-01
PB-212	1.010E+00	9.062E-02	2.468E-02	9.062E-02
BI-214	6.549E-01	9.051E-02	2.689E-02	9.051E-02
PB-214	6.420E-01	7.902E-02	3.013E-02	7.902E-02
RA-223	1.901E-01	1.275E-01	7.668E-02	1.275E-01
AC-228	9.337E-01	1.689E-01	4.980E-02	1.689E-01
TH-234	6.047E-01	4.002E-01	2.017E-01	4.002E-01
U-235	9.147E-02	2.023E-01	9.102E-02	2.023E-01
NP-236	6.271E-02	4.094E-02	2.705E-02	4.094E-02
NP-237	5.475E-01	1.454E-01	9.106E-02	1.454E-01
AM-243	1.667E-01	3.688E-02	1.920E-02	3.688E-02
AM-246	3.494E-02	6.395E-02	4.775E-02	6.395E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	4.282E-03	1.757E-02	1.489E-02	1.757E-02	NOT IDENT.
SB-125	1.711E-03	4.753E-02	4.078E-02	4.753E-02	NOT IDENT.
CS-137	2.695E-03	2.209E-02	1.589E-02	2.209E-02	NOT IDENT.
PO-209	4.025E-01	3.308E+00	2.836E+00	3.308E+00	NOT IDENT.
BI-211	-2.852E-01	4.895E-01	4.066E-01	4.895E-01	NOT IDENT.
PA-233	-2.070E-02	3.251E-02	2.783E-02	3.251E-02	NOT IDENT.
PA-234M	9.184E-01	2.542E+00	1.833E+00	2.542E+00	NOT IDENT.
NP-239	-3.802E-02	1.205E-01	1.004E-01	1.205E-01	NOT IDENT.
AM-241	6.800E-02	6.194E-02	5.028E-02	6.194E-02	NOT IDENT.
CM-243	3.644E-02	7.371E-02	4.227E-02	7.371E-02	NOT IDENT.
CF-249	-1.924E-03	2.034E-02	1.748E-02	2.034E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	837.3237
63.29	951.2666
74.66	1054.4523
74.81	1054.7008
74.81	1054.7008
77.11	1058.4629
77.11	1058.4629
86.48	1023.7162
87.30	1024.9138
87.30	1024.9138
92.58	1032.4844
98.44	960.5938
103.76	812.3274
105.31	854.0552
129.07	847.8066
143.76	876.4656
198.00	751.7993
209.25	736.7487
228.18	687.0496
238.63	616.2381
242.00	617.7665
269.46	514.4167
270.25	559.6155
277.36	535.0349
295.22	510.7292
300.09	470.2185
312.17	484.6045
338.32	457.4086
351.93	426.5063
387.59	394.7101
409.46	364.9160
427.87	338.4863
463.00	278.7134
510.77	287.7644
583.19	239.8887
609.31	239.2146
661.66	229.0518
727.33	227.8264
763.13	179.2998
768.36	196.8301
785.37	182.9250
794.95	169.5087
806.17	162.2859
831.80	195.3465
860.56	164.9811
896.60	147.6650
911.20	137.7598
934.06	125.1652
964.77	184.7574
968.97	184.9703
1001.03	115.6881
1078.86	112.0137
1120.29	135.3849
1155.19	111.0491
1173.23	109.4730
1238.11	106.8080
1280.96	91.1985
1332.51	96.4542
1377.67	69.5465
1401.50	68.8125
1407.98	86.1263
1460.80	85.7976
1509.23	74.1330
1588.20	87.8993
1620.50	48.0538
1729.60	58.7863
1764.49	46.3230

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701019

Total Uranium Activity	4.2322E-02	ug/g
Total Uranium Counting Unc.	9.3593E-02	ug/g
Total Uranium Tpu	9.3593E-08	ug/g
Total Uranium Mda	4.2116E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 02:56:41.94

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701020.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:35:59
Sample ID        : G198701020           Sample quantity  : 1.23160E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:05.31  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.27*	116	1025	1.06	93.33	89	10	3.86E-03	67.1	
2	0	53.59	87	701	1.41	107.94	105	7	2.90E-03	51.6	
3	0	63.02*	344	1553	1.16	126.80	122	11	1.15E-02	24.7	
4	2	74.68*	1363	1082	1.23	150.10	144	15	4.54E-02	5.2	3.05E+00
5	2	77.00*	2091	908	1.04	154.75	144	15	6.97E-02	3.5	
6	3	84.12*	190	1059	1.15	168.97	164	30	6.35E-03	32.0	3.51E+00
7	3	87.15*	685	1003	1.14	175.04	164	30	2.28E-02	9.0	
8	3	89.77	487	819	0.98	180.27	164	30	1.62E-02	10.4	
9	3	92.71*	941	1014	1.29	186.14	164	30	3.14E-02	7.9	
10	0	99.11	156	977	1.95	198.93	195	9	5.19E-03	37.1	
11	0	105.34	114	697	1.69	211.39	209	7	3.81E-03	39.4	
12	0	109.29	125	929	1.88	219.28	216	9	4.16E-03	44.9	
13	0	129.25	153	892	1.16	259.18	255	8	5.10E-03	34.7	
14	0	143.86*	119	864	1.23	288.38	284	9	3.95E-03	50.2	
15	0	182.63	84	437	1.09	365.88	363	6	2.80E-03	40.9	
16	0	185.91*	432	840	1.42	372.44	368	10	1.44E-02	16.0	
17	0	209.41	387	798	1.31	419.39	414	11	1.29E-02	15.0	
18	3	238.72*	3368	527	1.17	477.97	473	18	1.12E-01	2.2	2.32E+00
19	3	241.40	599	671	1.85	483.34	473	18	2.00E-02	12.7	
20	0	270.48	266	587	1.95	541.45	535	12	8.88E-03	19.2	
21	0	277.52	221	625	1.48	555.52	550	14	7.37E-03	24.8	
22	0	295.39*	470	549	1.23	591.22	585	12	1.57E-02	12.2	
23	0	300.57	263	491	1.40	601.58	597	12	8.75E-03	18.1	
24	0	328.39	146	550	1.17	657.18	651	11	4.85E-03	32.3	
25	0	338.43*	579	510	1.25	677.23	672	11	1.93E-02	9.2	
26	0	351.98*	823	502	1.33	704.31	698	14	2.74E-02	7.6	
27	0	409.52	92	297	1.15	819.30	815	9	3.08E-03	35.2	
28	0	463.35	189	290	1.42	926.87	921	12	6.30E-03	19.5	
29	0	511.06*	342	413	2.36	1022.20	1012	18	1.14E-02	19.4	
30	0	530.41	23	191	0.66	1060.86	1057	9	7.76E-04	108.6	
31	0	562.24	13	198	0.78	1124.46	1122	9	4.33E-04	197.1	
32	0	583.48	1046	251	1.44	1166.89	1161	14	3.49E-02	4.5	
33	0	609.71*	482	341	1.35	1219.30	1213	14	1.61E-02	10.3	
34	0	662.73	39	184	2.20	1325.22	1321	10	1.29E-03	67.9	
35	0	727.99	226	241	1.53	1455.60	1447	17	7.54E-03	17.1	
36	0	773.09	46	134	1.41	1545.69	1542	10	1.52E-03	50.2	
37	0	795.38	87	142	1.71	1590.23	1586	10	2.90E-03	27.9	
38	0	836.21	33	143	0.90	1671.78	1668	9	1.11E-03	67.3	

Sample ID : G198701020 Acquisition date : 13-DEC-2007 18:35:59

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	841.02*	1	121	1.43	1681.39	1676	10	4.11E-05	*****	
40	0	845.95	38	131	3.90	1691.24	1686	13	1.28E-03	63.3	
41	0	861.25	143	125	1.57	1721.81	1716	14	4.77E-03	18.6	
42	5	905.81*	39	147	3.36	1810.80	1804	27	1.31E-03	73.5	2.41E+00
43	5	911.60*	608	116	1.78	1822.38	1804	27	2.03E-02	5.7	
44	0	924.04	4	102	0.90	1847.23	1845	10	1.28E-04	493.9	
45	2	964.94	143	96	2.57	1928.91	1918	28	4.76E-03	17.7	1.81E+00
46	2	969.39	428	74	1.98	1937.80	1918	28	1.43E-02	6.3	
47	0	1000.94	44	82	3.39	2000.82	1996	11	1.48E-03	41.8	
48	0	1015.52	27	89	0.62	2029.92	2024	12	8.85E-04	74.0	
49	0	1101.02	41	89	7.18	2200.69	2192	17	1.35E-03	55.6	
50	0	1114.88	15	79	0.85	2228.37	2220	11	5.02E-04	120.3	
51	0	1121.33*	92	97	1.90	2241.24	2236	15	3.08E-03	29.0	
52	0	1172.52	11	24	0.82	2343.47	2341	5	3.60E-04	71.7	
53	0	1239.32	38	116	1.13	2476.87	2468	14	1.26E-03	62.7	
54	0	1291.41	23	68	1.93	2580.89	2572	13	7.72E-04	76.3	
55	0	1331.45	25	133	9.79	2660.82	2643	28	8.49E-04	129.5	
56	0	1379.29	32	73	1.43	2756.34	2747	14	1.06E-03	59.8	
57	0	1405.47	68	171	16.98	2808.62	2781	43	2.27E-03	67.1	
58	0	1441.42	14	41	1.01	2880.40	2868	14	4.65E-04	101.9	
59	0	1461.53*	516	66	1.86	2920.53	2914	14	1.72E-02	5.8	
60	0	1499.09	34	45	4.20	2995.53	2988	18	1.13E-03	49.3	
61	1	1588.99	69	60	2.48	3175.00	3168	22	2.29E-03	25.5	4.26E+00
62	1	1592.71	33	47	2.73	3182.42	3168	22	1.08E-03	57.7	
63	0	1621.37	33	18	1.88	3239.63	3234	12	1.09E-03	31.2	
64	0	1638.12	10	91	5.23	3273.07	3254	24	3.26E-04	266.3	
65	0	1730.05	27	30	2.71	3456.57	3447	16	9.06E-04	50.1	
66	0	1765.92*	100	54	2.43	3528.17	3518	22	3.35E-03	23.4	
67	0	1774.10	17	19	1.51	3544.51	3539	11	5.68E-04	55.4	
68	0	1849.82	17	27	0.74	3695.62	3686	14	5.55E-04	74.7	
69	0	1947.41	10	38	4.19	3890.39	3875	17	3.25E-04	148.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701020       *
* Acquisition date : 13-DEC-2007 18:35:59 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:05.31     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701020           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2316E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.627E+00	4.988E-01	2.704E-01	0.000E+00
CO-60	6.959E-03	9.781E-03	2.963E-02	0.000E+00
CS-137	1.768E-02	2.355E-02	3.135E-02	0.000E+00
EU-155	5.898E-02	4.587E-02	7.136E-02	0.000E+00
TL-208	4.299E-01	4.833E-02	2.901E-02	0.000E+00
BI-212	8.068E-01	2.787E-01	2.293E-01	0.000E+00
PB-212	1.274E+00	1.187E-01	4.252E-02	0.000E+00
BI-214	3.769E-01	8.121E-02	5.887E-02	0.000E+00
PB-214	4.888E-01	7.757E-02	5.367E-02	0.000E+00
RA-223	3.503E-01	1.342E-01	1.343E-01	0.000E+00
AC-228	1.200E+00	1.716E-01	1.024E-01	0.000E+00
PA-234M	2.909E+00	2.396E+00	3.413E+00	0.000E+00
TH-234	1.792E+00	3.189E-01	3.165E-01	0.000E+00
U-235	1.296E-01	1.282E-01	1.519E-01	0.000E+00
NP-236	4.280E-02	3.138E-02	3.967E-02	0.000E+00
NP-237	5.624E-01	1.104E-01	1.357E-01	0.000E+00
AM-243	1.994E-01	2.585E-02	2.458E-02	0.000E+00
CM-243	5.306E-02	4.127E-02	6.334E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
RH-101	8.698E-03	1.978E-02	2.750E-02	0.000E+00	NOT IDENT.
SB-125	2.377E-02	4.576E-02	7.896E-02	0.000E+00	NOT IDENT.
PO-209	3.542E+00	3.490E+00	5.927E+00	0.000E+00	NOT IDENT.
BI-211	-3.185E-01	6.211E-01	8.574E-01	0.000E+00	NOT IDENT.
PA-233	-4.656E-03	3.037E-02	5.224E-02	0.000E+00	NOT IDENT.
NP-239	-2.979E-02	1.043E-01	1.724E-01	0.000E+00	NOT IDENT.
AM-241	0.000E+00	2.501E-02	4.129E-02	0.000E+00	NOT IDENT.
AM-246	-1.110E-03	5.570E-02	9.495E-02	0.000E+00	NOT IDENT.
CF-249	1.300E-02	1.902E-02	3.320E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 02:56:43.09

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701020.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:35:59
Sample ID        : G198701020           Sample quantity  : 1.23160E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:05.31  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	516	10.66*	9.765E-01	3.627E+00	3.627E+00	14.03
CO-60	1173.23	11	100.00*	1.168E+00	6.768E-03	6.959E-03	143.42
	1332.51	25	100.00	1.054E+00	1.769E-02	1.819E-02	259.18
CS-137	661.66	39	85.10*	1.885E+00	1.759E-02	1.768E-02	135.95
EU-155	105.31	114	21.20*	6.883E+00	5.728E-02	5.898E-02	79.36
TL-208	277.36	221	6.31	3.980E+00	6.444E-01	6.444E-01	50.06
	510.77	342	22.60	2.367E+00	4.679E-01	4.679E-01	39.35
	583.19	1046	84.50*	2.107E+00	4.299E-01	4.299E-01	11.47
	763.13	------	1.81	1.670E+00	------	Line Not Found	------
	860.56	143	12.42	1.507E+00	5.589E-01	5.589E-01	38.36
BI-212	727.33	226	11.80*	1.738E+00	8.068E-01	8.068E-01	35.25
	785.37	------	1.10	1.629E+00	------	Line Not Found	------
	1620.50	33	1.49	8.963E-01	1.798E+00	1.798E+00	62.85
PB-212	74.81	1363	10.40	7.332E+00	1.307E+00	1.307E+00	13.23
	77.11	2091	17.50	7.311E+00	1.196E+00	1.196E+00	10.82
	87.30	685	7.81	7.189E+00	8.929E-01	8.929E-01	20.02
	238.63	3368	43.30*	4.465E+00	1.274E+00	1.274E+00	9.50
	300.09	263	3.28	3.733E+00	1.569E+00	1.569E+00	36.65
BI-214	609.31	482	46.10*	2.027E+00	3.769E-01	3.769E-01	21.99
	768.36	------	4.94	1.660E+00	------	Line Not Found	------
	806.17	------	1.22	1.594E+00	------	Line Not Found	------
	934.06	------	3.03	1.408E+00	------	Line Not Found	------
	1120.29	92	15.10	1.212E+00	3.695E-01	3.695E-01	58.26
	1155.19	------	1.63	1.183E+00	------	Line Not Found	------
	1238.11	38	5.79	1.117E+00	4.260E-01	4.261E-01	125.66
	1280.96	------	1.43	1.087E+00	------	Line Not Found	------
	1377.67	32	4.00	1.024E+00	5.686E-01	5.686E-01	119.88
	1401.50	------	1.27	1.011E+00	------	Line Not Found	------
	1407.98	------	2.15	1.007E+00	------	Line Not Found	------
	1509.23	------	2.11	9.511E-01	------	Line Not Found	------
	1729.60	27	2.92	8.487E-01	8.021E-01	8.022E-01	100.31
	1764.49	100	15.40	8.341E-01	5.721E-01	5.722E-01	47.32

Sample ID : G198701020 Acquisition date : 13-DEC-2007 18:35:59

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
PB-214	74.81	1363	6.44	7.332E+00	2.111E+00	2.111E+00	13.23
	77.11	2091	10.80	7.311E+00	1.937E+00	1.938E+00	10.82
	87.30	685	4.84	7.189E+00	1.441E+00	1.441E+00	20.02
	242.00	599	7.43	4.428E+00	1.331E+00	1.331E+00	26.73
	295.22	470	19.30	3.786E+00	4.703E-01	4.703E-01	25.16
	351.93	823	37.60*	3.274E+00	4.888E-01	4.888E-01	16.19
RA-223	269.46	266	13.70*	4.061E+00	3.503E-01	3.503E-01	39.08
AC-228	129.07	153	2.42	6.405E+00	7.219E-01	7.219E-01	70.23
	209.25	387	3.89	4.900E+00	1.483E+00	1.483E+00	31.53
	270.25	266	3.46	4.061E+00	1.387E+00	1.387E+00	39.08
	338.32	579	11.27	3.384E+00	1.111E+00	1.111E+00	19.20
	409.46	92	1.92	2.874E+00	1.225E+00	1.225E+00	70.52
	463.00	189	4.40	2.580E+00	1.217E+00	1.217E+00	39.47
	794.95	87	4.25	1.612E+00	9.298E-01	9.298E-01	56.57
	911.20	608	25.80*	1.437E+00	1.200E+00	1.200E+00	14.59
	964.77	143	4.99	1.371E+00	1.526E+00	1.526E+00	36.46
	968.97	428	15.80	1.366E+00	1.450E+00	1.450E+00	15.28
	1588.20	69	3.22	9.115E-01	1.711E+00	1.711E+00	51.48
PA-234M	1001.03	44	0.84*	1.330E+00	2.909E+00	2.909E+00	84.06
TH-234	63.29	344	4.80	7.386E+00	7.087E-01	7.087E-01	50.01
	92.58	941	5.41*	7.105E+00	1.792E+00	1.792E+00	18.16
U-235	143.76	119	10.96*	6.105E+00	1.296E-01	1.296E-01	100.95
NP-236	98.44	156	38.00*	6.997E+00	4.280E-02	4.280E-02	74.81
NP-237	86.48	685	12.40*	7.189E+00	5.624E-01	5.624E-01	20.02
AM-243	74.66	1363	68.20*	7.332E+00	1.994E-01	1.994E-01	13.23
CM-243	103.76	114	23.00*	6.883E+00	5.279E-02	5.306E-02	79.36

Flag: "*" = Keyline

Sample ID : G198701020 Acquisition date : 13-DEC-2007 18:35:59

Total number of lines in spectrum 69
Number of unidentified lines 28
Number of lines tentatively identified by NID 41 59.42%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.627E+00	3.627E+00	0.509E+00	14.03	
CO-60	1.66E+08S	1.03	6.768E-03	6.959E-03	9.980E-03	143.42	
CS-137	9.47E+08S	1.00	1.759E-02	1.768E-02	2.403E-02	135.95	
EU-155	1.57E+08S	1.03	5.728E-02	5.898E-02	4.681E-02	79.36	
TL-208	4.43E+17S	1.00	4.299E-01	4.299E-01	0.493E-01	11.47	
BI-212	4.43E+17S	1.00	8.068E-01	8.068E-01	2.844E-01	35.25	
PB-212	4.43E+17S	1.00	1.274E+00	1.274E+00	0.121E+00	9.50	
BI-214	5.05E+10S	1.00	3.769E-01	3.769E-01	0.829E-01	21.99	
PB-214	5.05E+10S	1.00	4.888E-01	4.888E-01	0.792E-01	16.19	
RA-223	1.04E+12S	1.00	3.503E-01	3.503E-01	1.369E-01	39.08	
AC-228	4.43E+17S	1.00	1.200E+00	1.200E+00	0.175E+00	14.59	
PA-234M	1.41E+17S	1.00	2.909E+00	2.909E+00	2.445E+00	84.06	
TH-234	1.41E+17S	1.00	1.792E+00	1.792E+00	0.325E+00	18.16	
U-235	2.22E+16S	1.00	1.296E-01	1.296E-01	1.309E-01	100.95	
NP-236	4.89E+12S	1.00	4.280E-02	4.280E-02	3.202E-02	74.81	
NP-237	6.75E+13S	1.00	5.624E-01	5.624E-01	1.126E-01	20.02	
AM-243	2.33E+11S	1.00	1.994E-01	1.994E-01	0.264E-01	13.23	
CM-243	8.99E+08S	1.01	5.279E-02	5.306E-02	4.211E-02	79.36	
			---	---			
	Total Activity :		1.432E+01	1.432E+01			

Grand Total Activity : 1.432E+01 1.432E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701020 Acquisition date : 13-DEC-2007 18:35:59

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.27	116	1025	1.06	93.33	89	10	3.86E-03	****	7.29E+00	
0	53.59	87	701	1.41	107.94	105	7	2.90E-03	****	7.36E+00	
3	84.12	190	1059	1.15	168.97	164	30	6.35E-03	64.0	7.23E+00	
3	89.77	487	819	0.98	180.27	164	30	1.62E-02	20.9	7.15E+00	
0	109.29	125	929	1.88	219.28	216	9	4.16E-03	89.8	6.81E+00	
0	182.63	84	437	1.09	365.88	363	6	2.80E-03	81.8	5.35E+00	
0	185.91	432	840	1.42	372.44	368	10	1.44E-02	32.0	5.30E+00	
0	328.39	146	550	1.17	657.18	651	11	4.85E-03	64.7	3.47E+00	
0	530.41	23	191	0.66	1060.86	1057	9	7.76E-04	****	2.29E+00	
0	562.24	13	198	0.78	1124.46	1122	9	4.33E-04	****	2.18E+00	
0	773.09	46	134	1.41	1545.69	1542	10	1.52E-03	****	1.65E+00	
0	836.21	33	143	0.90	1671.78	1668	9	1.11E-03	****	1.55E+00	
0	841.02	1	121	1.43	1681.39	1676	10	4.11E-05	****	1.54E+00	
0	845.95	38	131	3.90	1691.24	1686	13	1.28E-03	****	1.53E+00	
5	905.81	39	147	3.36	1810.80	1804	27	1.31E-03	****	1.44E+00	
0	924.04	4	102	0.90	1847.23	1845	10	1.28E-04	****	1.42E+00	
0	1015.52	27	89	0.62	2029.92	2024	12	8.85E-04	****	1.31E+00	
0	1101.02	41	89	7.18	2200.69	2192	17	1.35E-03	****	1.23E+00	
0	1114.88	15	79	0.85	2228.37	2220	11	5.02E-04	****	1.22E+00	
0	1291.41	23	68	1.93	2580.89	2572	13	7.72E-04	****	1.08E+00	
0	1405.47	68	171	16.98	2808.62	2781	43	2.27E-03	****	1.01E+00	
0	1441.42	14	41	1.01	2880.40	2868	14	4.65E-04	****	9.88E-01	
0	1499.09	34	45	4.20	2995.53	2988	18	1.13E-03	98.7	9.56E-01	
1	1592.71	33	47	2.73	3182.42	3168	22	1.08E-03	****	9.10E-01	
0	1638.12	10	91	5.23	3273.07	3254	24	3.26E-04	****	8.89E-01	
0	1774.10	17	19	1.51	3544.51	3539	11	5.68E-04	****	8.31E-01	
0	1849.82	17	27	0.74	3695.62	3686	14	5.55E-04	****	8.01E-01	
0	1947.41	10	38	4.19	3890.39	3875	17	3.25E-04	****	7.66E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701020            *
* Acquisition date : 13-DEC-2007 18:35:59 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:05.31     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701020           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2316E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.627E+00	4.988E-01	1.353E-01	4.988E-01
CO-60	6.959E-03	9.781E-03	1.482E-02	9.781E-03
CS-137	1.768E-02	2.355E-02	1.569E-02	2.355E-02
EU-155	5.898E-02	4.587E-02	3.570E-02	4.587E-02
TL-208	4.299E-01	4.833E-02	1.452E-02	4.833E-02
BI-212	8.068E-01	2.787E-01	1.147E-01	2.787E-01
PB-212	1.274E+00	1.187E-01	2.127E-02	1.187E-01
BI-214	3.769E-01	8.121E-02	2.945E-02	8.121E-02
PB-214	4.888E-01	7.757E-02	2.685E-02	7.757E-02
RA-223	3.503E-01	1.342E-01	6.718E-02	1.342E-01
AC-228	1.200E+00	1.716E-01	5.122E-02	1.716E-01
PA-234M	2.909E+00	2.396E+00	1.707E+00	2.396E+00
TH-234	1.792E+00	3.189E-01	1.583E-01	3.189E-01
U-235	1.296E-01	1.282E-01	7.598E-02	1.282E-01
NP-236	4.280E-02	3.138E-02	1.985E-02	3.138E-02
NP-237	5.624E-01	1.104E-01	6.791E-02	1.104E-01
AM-243	1.994E-01	2.585E-02	1.230E-02	2.585E-02
CM-243	5.306E-02	4.127E-02	3.169E-02	4.127E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
RH-101	8.698E-03	1.978E-02	1.376E-02	1.978E-02	NOT IDENT.
SB-125	2.377E-02	4.576E-02	3.950E-02	4.576E-02	NOT IDENT.
PO-209	3.542E+00	3.490E+00	2.965E+00	3.490E+00	NOT IDENT.
BI-211	-3.185E-01	6.211E-01	4.290E-01	6.211E-01	NOT IDENT.
PA-233	-4.656E-03	3.037E-02	2.614E-02	3.037E-02	NOT IDENT.
NP-239	-2.979E-02	1.043E-01	8.627E-02	1.043E-01	NOT IDENT.
AM-241	4.312E-02	2.501E-02	2.065E-02	2.501E-02	NOT IDENT.
AM-246	-1.110E-03	5.570E-02	4.750E-02	5.570E-02	NOT IDENT.
CF-249	1.300E-02	1.902E-02	1.661E-02	1.902E-02	NOT IDENT.

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                 2040 SAVAGE ROAD                          *
*                              CHARLESTON ,SC 29417                         *
*                        GAMMA SPECTROSCOPY BACKGROUND REPORT               *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	798.3592
63.29	1019.4683
74.66	1211.8240
74.81	1212.1638
74.81	1212.1638
77.11	1216.2158
77.11	1216.2158
86.48	1182.0638
87.30	1183.7104
87.30	1183.7104
92.58	1194.1155
98.44	901.6834
103.76	811.9575
105.31	827.4809
129.07	847.3383
143.76	842.6641
198.00	668.7055
209.25	697.9322
228.18	625.0964
238.63	558.8115
242.00	560.4210
269.46	465.2603
270.25	465.5517
277.36	452.9925
295.22	410.7383
300.09	426.4178
312.17	452.1157
338.32	421.3874
351.93	364.3019
387.59	329.3493
409.46	323.4734
427.87	293.9984
463.00	276.6360
510.77	265.2159
583.19	225.8559
609.31	256.5461
661.66	213.2722
727.33	188.5078
763.13	200.9644
768.36	194.7964
785.37	173.4928
794.95	155.9681
806.17	130.3149
831.80	186.9328
860.56	165.8081
896.60	107.4391
911.20	123.4160
934.06	114.8212
964.77	115.9034
968.97	116.0498
1001.03	124.6825
1078.86	94.1895
1120.29	111.1328
1155.19	101.9074
1173.23	97.5584
1238.11	96.2227
1280.96	84.6065
1332.51	73.3183
1377.67	76.1117
1401.50	68.3600
1407.98	68.4581
1460.80	68.7405
1509.23	61.7356
1588.20	70.5913
1620.50	58.7636
1729.60	37.3422
1764.49	44.4209

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701020

Total Uranium Activity	5.9982E-02	ug/g
Total Uranium Counting Unc.	5.9339E-02	ug/g
Total Uranium Tpu	5.9339E-08	ug/g
Total Uranium Mda	3.5155E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 02:59:06.02

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701021.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:36:25
Sample ID         : G198701021           Sample quantity  : 1.33960E+02 GRAM
Detector name     : GAM21                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00         Elapsed real time: 0 08:20:50.78  0.2%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708131               Detector SN#     :
Matrix Spike ID  :                       LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.95	193	894	1.55	93.00	89	9	6.43E-03	28.9	
2	0	63.54	369	1424	1.43	126.13	120	10	1.23E-02	19.8	
3	6	74.97	1746	1638	1.60	148.96	140	20	5.82E-02	5.3	3.25E+00
4	6	77.27*	2356	1283	1.31	153.56	140	20	7.85E-02	3.6	
5	0	84.15	211	991	1.22	167.30	165	6	7.04E-03	24.5	
6	2	87.28	785	1309	1.29	173.54	170	22	2.62E-02	8.4	4.45E+00
7	2	89.95	542	1438	1.65	178.88	170	22	1.81E-02	14.3	
8	2	93.03*	940	1211	1.67	185.02	170	22	3.13E-02	8.6	
9	0	99.14	236	1026	2.01	197.22	193	10	7.87E-03	26.2	
10	0	105.60	117	928	1.61	210.14	206	8	3.91E-03	46.0	
11	0	128.87	352	1132	1.47	256.60	251	11	1.17E-02	19.2	
12	0	132.71	75	702	0.75	264.28	262	7	2.50E-03	59.9	
13	0	143.27	71	870	1.14	285.38	282	8	2.37E-03	72.8	
14	0	154.40	192	1283	3.82	307.61	301	12	6.39E-03	38.1	
15	0	185.92*	662	1398	1.48	370.56	363	14	2.21E-02	13.2	
16	0	209.32	322	854	1.18	417.31	413	10	1.07E-02	17.9	
17	2	238.59*	3613	595	1.49	475.78	467	26	1.20E-01	2.2	2.04E+00
18	2	241.60	794	648	1.91	481.79	467	26	2.65E-02	9.4	
19	0	263.79*	38	571	2.31	526.13	520	11	1.28E-03	133.8	
20	0	270.53	260	656	1.58	539.59	534	12	8.65E-03	20.8	
21	0	277.48	125	581	1.20	553.48	548	11	4.16E-03	38.4	
22	0	295.21*	704	544	1.28	588.90	584	11	2.35E-02	8.2	
23	0	300.04	163	444	1.50	598.55	595	9	5.45E-03	24.5	
24	0	327.83	148	514	2.17	654.08	649	11	4.93E-03	30.8	
25	0	338.42	589	562	1.49	675.23	670	13	1.96E-02	9.3	
26	0	351.91*	1221	479	1.60	702.19	697	13	4.07E-02	5.0	
27	0	409.20	112	300	1.02	816.66	812	10	3.73E-03	30.5	
28	0	462.66	202	266	1.35	923.49	919	11	6.75E-03	17.0	
29	0	510.75*	305	349	2.01	1019.60	1011	19	1.02E-02	19.9	
30	0	546.41	51	138	2.27	1090.88	1087	8	1.70E-03	42.4	
31	0	554.39	29	172	1.06	1106.84	1103	10	9.70E-04	86.0	
32	0	567.55	254	354	1.64	1133.14	1125	16	8.48E-03	17.7	
33	0	583.23*	878	261	1.66	1164.48	1159	14	2.93E-02	5.4	
34	0	609.28*	819	275	1.77	1216.55	1211	16	2.73E-02	6.1	
35	0	727.48	197	177	1.52	1452.88	1447	14	6.58E-03	16.1	
36	0	754.93	31	97	1.37	1507.76	1504	8	1.05E-03	57.4	
37	0	767.76	96	157	1.92	1533.40	1528	11	3.19E-03	27.3	
38	0	772.74*	26	206	5.56	1543.37	1539	16	8.78E-04	138.9	

Sample ID : G198701021 Acquisition date : 13-DEC-2007 18:36:25

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	785.56	75	116	1.23	1569.01	1564	11	2.51E-03	30.2	
40	0	794.82	103	106	1.97	1587.52	1583	11	3.44E-03	21.6	
41	0	840.40	27	82	1.42	1678.68	1675	8	8.95E-04	62.0	
42	0	860.64	94	104	1.45	1719.14	1713	12	3.12E-03	24.2	
43	0	911.07	488	180	1.72	1820.02	1814	14	1.63E-02	7.4	
44	0	935.05	43	101	1.48	1867.97	1860	12	1.43E-03	49.3	
45	2	964.14	105	107	2.40	1926.17	1919	25	3.49E-03	23.5	1.55E+00
46	2	968.95	358	87	2.13	1935.78	1919	25	1.19E-02	7.7	
47	0	1001.61	24	53	2.12	2001.11	1996	8	8.08E-04	52.3	
48	0	1048.02	32	115	5.14	2093.95	2083	17	1.06E-03	79.1	
49	0	1095.97	31	108	1.32	2189.90	2182	15	1.05E-03	74.5	
50	0	1120.66*	150	136	1.85	2239.30	2233	16	5.02E-03	21.3	
51	0	1238.84	111	119	2.53	2475.78	2465	20	3.69E-03	26.0	
52	2	1283.37	20	21	1.71	2564.90	2563	15	6.52E-04	37.6	1.76E+00
53	2	1286.29	40	68	2.32	2570.74	2563	15	1.35E-03	46.1	
54	8	1436.23	23	47	4.63	2870.89	2862	35	7.56E-04	71.1	1.61E+00
55	8	1446.27	24	19	3.17	2891.00	2862	35	7.93E-04	44.5	
56	0	1451.92	31	18	1.96	2902.31	2897	12	1.03E-03	32.7	
57	0	1460.65*	784	81	2.49	2919.77	2909	24	2.61E-02	4.9	
58	0	1562.02*	20	24	2.77	3122.75	3116	12	6.62E-04	65.4	
59	0	1589.58	15	53	1.76	3177.94	3171	10	4.91E-04	95.8	
60	0	1593.95	18	40	1.66	3186.68	3182	9	5.95E-04	69.6	
61	0	1631.46	33	44	2.23	3261.81	3251	16	1.11E-03	47.8	
62	0	1668.71	13	55	5.21	3336.40	3322	19	4.25E-04	149.3	
63	0	1729.38	27	24	1.59	3457.92	3450	12	8.89E-04	41.6	
64	0	1764.73	121	60	1.49	3528.73	3520	16	4.05E-03	16.9	
65	0	1847.46	38	30	3.06	3694.47	3685	15	1.26E-03	35.5	
66	0	2032.06	22	14	3.81	4064.36	4056	14	7.33E-04	41.9	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701021       *
* Acquisition date : 13-DEC-2007 18:36:25 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:50.78     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701021           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3396E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	6.657E+00	7.315E-01	3.140E-01	0.000E+00
EU-155	4.712E-02	4.264E-02	6.364E-02	0.000E+00
TL-208	3.729E-01	4.790E-02	2.939E-02	0.000E+00
BI-212	7.568E-01	2.462E-01	2.335E-01	0.000E+00
PB-212	1.192E+00	8.764E-02	4.031E-02	0.000E+00
BI-214	6.675E-01	9.450E-02	5.747E-02	0.000E+00
PB-214	6.814E-01	7.488E-02	5.140E-02	0.000E+00
RA-223	3.048E-01	1.251E-01	1.313E-01	0.000E+00
AC-228	1.076E+00	1.711E-01	1.196E-01	0.000E+00
PA-234M	1.807E+00	1.857E+00	3.436E+00	0.000E+00
TH-234	1.385E+00	2.541E-01	2.576E-01	0.000E+00
U-235	6.222E-02	8.898E-02	1.347E-01	0.000E+00
NP-236	5.039E-02	2.612E-02	3.061E-02	0.000E+00
NP-237	4.987E-01	8.996E-02	1.144E-01	0.000E+00
AM-243	1.992E-01	2.476E-02	2.113E-02	0.000E+00
CM-243	4.239E-02	3.836E-02	5.521E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	-1.665E-03	2.000E-02	3.328E-02	0.000E+00	NOT IDENT.
RH-101	3.962E-03	1.558E-02	2.466E-02	0.000E+00	NOT IDENT.
SB-125	3.110E-02	4.418E-02	7.754E-02	0.000E+00	NOT IDENT.
CS-137	-1.176E-03	1.959E-02	3.401E-02	0.000E+00	NOT IDENT.
PO-209	2.054E+00	3.483E+00	6.161E+00	0.000E+00	NOT IDENT.
BI-211	-3.203E-01	5.509E-01	9.147E-01	0.000E+00	NOT IDENT.
PA-233	-6.302E-03	2.777E-02	4.790E-02	0.000E+00	NOT IDENT.
NP-239	4.883E-02	9.521E-02	1.700E-01	0.000E+00	NOT IDENT.
AM-241	2.307E-02	2.303E-02	3.660E-02	0.000E+00	NOT IDENT.
AM-246	9.787E-02	7.032E-02	1.287E-01	0.000E+00	NOT IDENT.
CF-249	5.389E-03	1.899E-02	3.295E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 02:59:07.86

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701021.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:36:25
Sample ID        : G198701021           Sample quantity  : 1.33960E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:50.78  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	784	10.66*	7.435E-01	6.657E+00	6.657E+00	11.21
EU-155	105.31	117	21.20*	8.131E+00	4.576E-02	4.712E-02	92.34
TL-208	277.36	125	6.31	4.078E+00	3.262E-01	3.262E-01	77.06
	510.77	305	22.60	2.160E+00	4.203E-01	4.203E-01	40.22
	583.19	878	84.50*	1.875E+00	3.729E-01	3.729E-01	13.11
	763.13	------	1.81	1.415E+00	------	Line Not Found	------
	860.56	94	12.42	1.251E+00	4.053E-01	4.053E-01	48.91
BI-212	727.33	197	11.80*	1.487E+00	7.568E-01	7.568E-01	33.20
	785.37	75	1.10	1.373E+00	3.348E+00	3.348E+00	60.92
	1620.50	------	1.49	6.722E-01	------	Line Not Found	------
PB-212	74.81	1746	10.40	8.644E+00	1.306E+00	1.306E+00	12.69
	77.11	2356	17.50	8.639E+00	1.048E+00	1.048E+00	10.07
	87.30	785	7.81	8.537E+00	7.918E-01	7.918E-01	18.41
	238.63	3613	43.30*	4.709E+00	1.192E+00	1.192E+00	7.50
	300.09	163	3.28	3.774E+00	8.881E-01	8.881E-01	49.29
BI-214	609.31	819	46.10*	1.790E+00	6.675E-01	6.675E-01	14.45
	768.36	96	4.94	1.406E+00	9.262E-01	9.263E-01	55.24
	806.17	------	1.22	1.337E+00	------	Line Not Found	------
	934.06	43	3.03	1.151E+00	8.298E-01	8.299E-01	98.85
	1120.29	150	15.10	9.616E-01	6.968E-01	6.969E-01	42.97
	1155.19	------	1.63	9.335E-01	------	Line Not Found	------
	1238.11	111	5.79	8.720E-01	1.475E+00	1.476E+00	52.30
	1280.96	------	1.43	8.442E-01	------	Line Not Found	------
	1377.67	------	4.00	7.867E-01	------	Line Not Found	------
	1401.50	------	1.27	7.738E-01	------	Line Not Found	------
	1407.98	------	2.15	7.704E-01	------	Line Not Found	------
	1509.23	------	2.11	7.203E-01	------	Line Not Found	------
	1729.60	27	2.92	6.308E-01	9.736E-01	9.737E-01	83.37
	1764.49	121	15.40	6.184E-01	8.576E-01	8.576E-01	34.27
PB-214	74.81	1746	6.44	8.644E+00	2.109E+00	2.110E+00	12.69
	77.11	2356	10.80	8.639E+00	1.698E+00	1.699E+00	10.07
	87.30	785	4.84	8.537E+00	1.278E+00	1.278E+00	18.41

Sample ID : G198701021 Acquisition date : 13-DEC-2007 18:36:25

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	794	7.43	4.654E+00	1.543E+00	1.543E+00	19.79
	295.22	704	19.30	3.835E+00	6.393E-01	6.393E-01	17.19
	351.93	1221	37.60*	3.205E+00	6.813E-01	6.814E-01	11.21
RA-223	269.46	260	13.70*	4.180E+00	3.048E-01	3.048E-01	41.87
AC-228	129.07	352	2.42	7.451E+00	1.314E+00	1.314E+00	39.45
	209.25	322	3.89	5.292E+00	1.052E+00	1.052E+00	36.33
	270.25	260	3.46	4.180E+00	1.207E+00	1.207E+00	41.87
	338.32	589	11.27	3.338E+00	1.052E+00	1.052E+00	19.23
	409.46	112	1.92	2.735E+00	1.434E+00	1.434E+00	61.26
	463.00	202	4.40	2.400E+00	1.289E+00	1.289E+00	34.53
	794.95	103	4.25	1.357E+00	1.204E+00	1.204E+00	43.84
	911.20	488	25.80*	1.181E+00	1.076E+00	1.076E+00	16.22
	964.77	105	4.99	1.116E+00	1.264E+00	1.264E+00	47.38
	968.97	358	15.80	1.110E+00	1.373E+00	1.373E+00	16.74
	1588.20	15	3.22	6.850E-01	4.491E-01	4.491E-01	191.77
PA-234M	1001.03	24	0.84*	1.074E+00	1.807E+00	1.807E+00	104.84
TH-234	63.29	369	4.80	8.520E+00	6.071E-01	6.071E-01	40.19
	92.58	940	5.41*	8.433E+00	1.385E+00	1.385E+00	18.72
U-235	143.76	71	10.96*	7.015E+00	6.222E-02	6.222E-02	145.92
NP-236	98.44	236	38.00*	8.296E+00	5.039E-02	5.039E-02	52.90
NP-237	86.48	785	12.40*	8.537E+00	4.987E-01	4.987E-01	18.41
AM-243	74.66	1746	68.20*	8.644E+00	1.992E-01	1.992E-01	12.69
CM-243	103.76	117	23.00*	8.131E+00	4.217E-02	4.239E-02	92.34

Flag: "*" = Keyline

Sample ID : G198701021 Acquisition date : 13-DEC-2007 18:36:25

Total number of lines in spectrum 66
Number of unidentified lines 27
Number of lines tentatively identified by NID 39 59.09%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	6.657E+00	6.657E+00	0.746E+00	11.21	
EU-155	1.57E+08S	1.03	4.576E-02	4.712E-02	4.351E-02	92.34	
TL-208	4.43E+17S	1.00	3.729E-01	3.729E-01	0.489E-01	13.11	
BI-212	4.43E+17S	1.00	7.568E-01	7.568E-01	2.513E-01	33.20	
PB-212	4.43E+17S	1.00	1.192E+00	1.192E+00	0.089E+00	7.50	
BI-214	5.05E+10S	1.00	6.675E-01	6.675E-01	0.964E-01	14.45	
PB-214	5.05E+10S	1.00	6.813E-01	6.814E-01	0.764E-01	11.21	
RA-223	1.04E+12S	1.00	3.048E-01	3.048E-01	1.277E-01	41.87	
AC-228	4.43E+17S	1.00	1.076E+00	1.076E+00	0.175E+00	16.22	
PA-234M	1.41E+17S	1.00	1.807E+00	1.807E+00	1.895E+00	104.84	
TH-234	1.41E+17S	1.00	1.385E+00	1.385E+00	0.259E+00	18.72	
U-235	2.22E+16S	1.00	6.222E-02	6.222E-02	9.079E-02	145.92	
NP-236	4.89E+12S	1.00	5.039E-02	5.039E-02	2.666E-02	52.90	
NP-237	6.75E+13S	1.00	4.987E-01	4.987E-01	0.918E-01	18.41	
AM-243	2.33E+11S	1.00	1.992E-01	1.992E-01	0.253E-01	12.69	
CM-243	8.99E+08S	1.01	4.217E-02	4.239E-02	3.914E-02	92.34	
			---	---			
	Total Activity :		1.580E+01	1.580E+01			

Grand Total Activity : 1.580E+01 1.580E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701021 Acquisition date : 13-DEC-2007 18:36:25

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.95	193	894	1.55	93.00	89	9	6.43E-03	57.8	7.68E+00	
0	84.15	211	991	1.22	167.30	165	6	7.04E-03	49.0	8.58E+00	
2	89.95	542	1438	1.65	178.88	170	22	1.81E-02	28.6	8.49E+00	
0	132.71	75	702	0.75	264.28	262	7	2.50E-03	****	7.33E+00	
0	154.40	192	1283	3.82	307.61	301	12	6.39E-03	76.2	6.69E+00	
0	185.92	662	1398	1.48	370.56	363	14	2.21E-02	26.5	5.84E+00	
0	263.79	38	571	2.31	526.13	520	11	1.28E-03	****	4.28E+00	
0	327.83	148	514	2.17	654.08	649	11	4.93E-03	61.6	3.45E+00	
0	546.41	51	138	2.27	1090.88	1087	8	1.70E-03	84.8	2.01E+00	
0	554.39	29	172	1.06	1106.84	1103	10	9.70E-04	****	1.98E+00	
0	567.55	254	354	1.64	1133.14	1125	16	8.48E-03	35.4	1.93E+00	
0	754.93	31	97	1.37	1507.76	1504	8	1.05E-03	****	1.43E+00	
0	772.74	26	206	5.56	1543.37	1539	16	8.78E-04	****	1.40E+00	
0	840.40	27	82	1.42	1678.68	1675	8	8.95E-04	****	1.28E+00	
0	1048.02	32	115	5.14	2093.95	2083	17	1.06E-03	****	1.03E+00	
0	1095.97	31	108	1.32	2189.90	2182	15	1.05E-03	****	9.83E-01	
2	1283.37	20	21	1.71	2564.90	2563	15	6.52E-04	75.1	8.43E-01	
2	1286.29	40	68	2.32	2570.74	2563	15	1.35E-03	92.2	8.41E-01	
8	1436.23	23	47	4.63	2870.89	2862	35	7.56E-04	****	7.56E-01	
8	1446.27	24	19	3.17	2891.00	2862	35	7.93E-04	89.0	7.51E-01	
0	1451.92	31	18	1.96	2902.31	2897	12	1.03E-03	65.5	7.48E-01	
0	1562.02	20	24	2.77	3122.75	3116	12	6.62E-04	****	6.97E-01	
0	1593.95	18	40	1.66	3186.68	3182	9	5.95E-04	****	6.83E-01	
0	1631.46	33	44	2.23	3261.81	3251	16	1.11E-03	95.6	6.68E-01	
0	1668.71	13	55	5.21	3336.40	3322	19	4.25E-04	****	6.53E-01	
0	1847.46	38	30	3.06	3694.47	3685	15	1.26E-03	71.0	5.91E-01	
0	2032.06	22	14	3.81	4064.36	4056	14	7.33E-04	83.8	5.37E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701021            *
* Acquisition date : 13-DEC-2007 18:36:25 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:50.78     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701021           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3396E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	6.657E+00	7.315E-01	1.571E-01	7.315E-01
EU-155	4.712E-02	4.264E-02	3.184E-02	4.264E-02
TL-208	3.729E-01	4.790E-02	1.471E-02	4.790E-02
BI-212	7.568E-01	2.462E-01	1.168E-01	2.462E-01
PB-212	1.192E+00	8.764E-02	2.017E-02	8.764E-02
BI-214	6.675E-01	9.450E-02	2.875E-02	9.450E-02
PB-214	6.814E-01	7.488E-02	2.572E-02	7.488E-02
RA-223	3.048E-01	1.251E-01	6.571E-02	1.251E-01
AC-228	1.076E+00	1.711E-01	5.985E-02	1.711E-01
PA-234M	1.807E+00	1.857E+00	1.719E+00	1.857E+00
TH-234	1.385E+00	2.541E-01	1.289E-01	2.541E-01
U-235	6.222E-02	8.898E-02	6.740E-02	8.898E-02
NP-236	5.039E-02	2.612E-02	1.532E-02	2.612E-02
NP-237	4.987E-01	8.996E-02	5.724E-02	8.996E-02
AM-243	1.992E-01	2.476E-02	1.057E-02	2.476E-02
CM-243	4.239E-02	3.836E-02	2.762E-02	3.836E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-1.665E-03	2.000E-02	1.665E-02	2.000E-02	NOT IDENT.
RH-101	3.962E-03	1.558E-02	1.233E-02	1.558E-02	NOT IDENT.
SB-125	3.110E-02	4.418E-02	3.879E-02	4.418E-02	NOT IDENT.
CS-137	-1.176E-03	1.959E-02	1.701E-02	1.959E-02	NOT IDENT.
PO-209	2.054E+00	3.483E+00	3.082E+00	3.483E+00	NOT IDENT.
BI-211	-3.203E-01	5.509E-01	4.576E-01	5.509E-01	NOT IDENT.
PA-233	-6.302E-03	2.777E-02	2.396E-02	2.777E-02	NOT IDENT.
NP-239	4.883E-02	9.521E-02	8.507E-02	9.521E-02	NOT IDENT.
AM-241	2.307E-02	2.303E-02	1.831E-02	2.303E-02	NOT IDENT.
AM-246	9.787E-02	7.032E-02	6.438E-02	7.032E-02	NOT IDENT.
CF-249	5.389E-03	1.899E-02	1.648E-02	1.899E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	1005.7595
63.29	1241.8143
74.66	1423.6774
74.81	1423.9056
74.81	1423.9056
77.11	1427.4023
77.11	1427.4023
86.48	1356.3672
87.30	1900.4521
87.30	1900.4521
92.58	1279.1337
98.44	866.0054
103.76	990.7906
105.31	1055.4163
129.07	920.3447
143.76	1002.0009
198.00	817.9305
209.25	789.0359
228.18	729.0255
238.63	644.4729
242.00	645.6276
269.46	546.4471
270.25	538.9835
277.36	527.9464
295.22	483.6972
300.09	450.7432
312.17	446.0640
338.32	450.2289
351.93	371.2197
387.59	369.5474
409.46	323.7995
427.87	283.9926
463.00	287.5904
510.77	231.0688
583.19	213.6959
609.31	221.8699
661.66	223.5163
727.33	166.6106
763.13	152.2058
768.36	175.9152
785.37	171.9007
794.95	153.2632
806.17	141.2703
831.80	172.8625
860.56	123.7474
896.60	103.3151
911.20	132.9840
934.06	112.0286
964.77	117.7144
968.97	117.8185
1001.03	96.6803
1078.86	88.0762
1120.29	108.4654
1155.19	95.5316
1173.23	91.7269
1238.11	111.5802
1280.96	81.0508
1332.51	71.0130
1377.67	61.9365
1401.50	79.3296
1407.98	62.2433
1460.80	63.0765
1509.23	63.5532
1588.20	56.2751
1620.50	46.5630
1729.60	50.6689
1764.49	43.6393

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701021

Total Uranium Activity	2.8790E-02	ug/g
Total Uranium Counting Unc.	4.1170E-02	ug/g
Total Uranium Tpu	4.1170E-08	ug/g
Total Uranium Mda	3.1186E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 02:57:55.30

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701022.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:36:50
Sample ID        : G198701022           Sample quantity  : 1.56220E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:04.96  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.06*	38	813	1.27	105.57	103	6	1.26E-03	140.0	
2	0	63.24*	67	1327	1.01	125.93	122	8	2.23E-03	110.8	
3	5	74.67*	810	1472	1.13	148.78	145	16	2.70E-02	9.0	2.18E+00
4	5	76.96*	1502	1361	1.14	153.34	145	16	5.01E-02	5.2	
5	5	84.00*	262	1921	1.64	167.42	162	29	8.75E-03	33.0	2.83E+00
6	5	87.02	596	1278	1.17	173.45	162	29	1.99E-02	10.7	
7	5	89.85	412	1225	1.22	179.12	162	29	1.37E-02	15.1	
8	5	92.54*	512	1323	1.33	184.49	162	29	1.71E-02	16.5	
9	0	105.18	225	1042	1.74	209.77	206	8	7.49E-03	25.9	
10	0	129.59	303	1826	3.13	258.55	252	13	1.01E-02	29.7	
11	0	143.32*	68	970	0.79	286.01	283	7	2.27E-03	88.2	
12	0	153.93	131	1269	1.50	307.22	303	9	4.37E-03	49.9	
13	0	178.60	27	1077	0.67	356.54	352	8	8.88E-04	213.8	
14	0	185.71*	694	1575	1.50	370.74	365	11	2.31E-02	13.7	
15	0	209.40	359	1412	1.35	418.11	412	12	1.20E-02	21.7	
16	3	238.42*	3696	802	1.27	476.13	467	21	1.23E-01	2.3	1.32E+00
17	3	241.46	1183	963	1.87	482.21	467	21	3.94E-02	6.8	
18	0	269.96	322	1104	1.47	539.18	533	13	1.07E-02	22.0	
19	0	277.28	161	735	1.41	553.82	550	9	5.37E-03	31.3	
20	0	295.02*	1526	815	1.49	589.29	584	10	5.09E-02	4.6	
21	0	299.98	292	832	1.34	599.19	595	12	9.74E-03	20.6	
22	0	327.95	187	781	1.25	655.13	649	12	6.23E-03	30.8	
23	0	337.97*	813	814	1.33	675.16	669	12	2.71E-02	8.3	
24	0	351.60*	2936	722	1.47	702.40	696	13	9.79E-02	2.8	
25	0	409.51	104	586	2.03	818.20	814	11	3.46E-03	46.1	
26	0	462.93	343	478	1.33	925.01	919	14	1.14E-02	14.6	
27	0	510.55*	301	719	2.36	1020.22	1010	19	1.00E-02	28.9	
28	0	535.98	38	217	1.53	1071.07	1067	7	1.27E-03	66.3	
29	0	561.87	46	367	1.39	1122.84	1117	11	1.53E-03	82.2	
30	0	568.70*	17	298	0.82	1136.50	1134	9	5.54E-04	216.0	
31	0	582.78*	1297	487	1.69	1164.66	1157	17	4.32E-02	5.2	
32	0	608.88*	2171	760	1.78	1216.85	1207	20	7.24E-02	3.9	
33	2	661.15	455	260	1.74	1321.38	1306	28	1.52E-02	8.1	1.78E+00
34	2	664.89	118	266	2.46	1328.85	1306	28	3.95E-03	30.1	
35	0	703.73	36	390	1.95	1406.53	1396	13	1.21E-03	113.2	
36	0	726.91	294	320	1.87	1452.88	1448	12	9.79E-03	13.6	
37	0	767.73	172	329	1.67	1534.52	1528	13	5.74E-03	23.2	
38	0	785.18	65	274	1.53	1569.41	1565	12	2.18E-03	52.2	

Sample ID : G198701022 Acquisition date : 13-DEC-2007 18:36:50

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	794.55	124	268	2.27	1588.16	1583	12	4.14E-03	27.9	
40	0	835.04	49	282	3.20	1669.13	1663	12	1.62E-03	70.5	
41	0	860.14*	182	227	2.24	1719.35	1714	13	6.07E-03	23.1	
42	0	910.73*	908	235	2.14	1820.52	1813	15	3.03E-02	5.7	
43	0	933.33	103	253	1.87	1865.73	1859	14	3.42E-03	34.4	
44	1	964.57	185	279	2.53	1928.21	1918	28	6.16E-03	21.5	1.06E+00
45	1	968.56*	631	202	2.31	1936.18	1918	28	2.10E-02	7.2	
46	0	1000.49*	104	224	2.24	2000.06	1991	19	3.47E-03	44.7	
47	0	1055.28	26	112	0.66	2109.65	2107	10	8.54E-04	79.3	
48	0	1120.01*	500	237	2.26	2239.14	2231	20	1.67E-02	9.5	
49	0	1237.77*	166	147	2.16	2474.71	2470	13	5.54E-03	19.1	
50	0	1376.90	132	131	1.88	2753.07	2745	15	4.39E-03	20.9	
51	0	1459.99*	1265	134	2.91	2919.32	2906	27	4.22E-02	4.0	
52	0	1511.66	80	159	5.07	3022.70	3010	24	2.66E-03	45.0	
53	0	1620.50	34	74	0.81	3240.49	3234	12	1.12E-03	55.2	
54	0	1728.43	104	85	3.52	3456.46	3447	18	3.47E-03	23.0	
55	0	1763.47	543	71	2.92	3526.59	3514	22	1.81E-02	5.8	
56	0	1847.91*	56	47	1.69	3695.58	3687	15	1.87E-03	35.1	
57	0	1983.90	13	28	2.25	3967.77	3961	11	4.45E-04	80.9	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701022       *
* Acquisition date : 13-DEC-2007 18:36:50 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:04.96     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701022           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5622E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.428E+00	3.345E-01	1.399E-01	0.000E+00
CS-137	8.073E-02	1.457E-02	1.581E-02	0.000E+00
EU-155	6.881E-02	3.522E-02	5.119E-02	0.000E+00
TL-208	2.098E-01	2.654E-02	1.514E-02	0.000E+00
BI-212	4.031E-01	1.131E-01	1.189E-01	0.000E+00
PB-212	6.763E-01	5.030E-02	2.756E-02	0.000E+00
BI-214	6.650E-01	7.349E-02	3.216E-02	0.000E+00
PB-214	7.682E-01	5.999E-02	3.106E-02	0.000E+00
RA-223	1.994E-01	8.662E-02	8.719E-02	0.000E+00
AC-228	6.896E-01	1.023E-01	5.251E-02	0.000E+00
PA-234M	2.635E+00	2.322E+00	1.713E+00	0.000E+00
TH-234	6.307E-01	2.107E-01	2.094E-01	0.000E+00
U-235	3.956E-02	6.847E-02	9.987E-02	0.000E+00
NP-237	3.346E-01	7.590E-02	9.550E-02	0.000E+00
AM-243	9.840E-02	1.901E-02	2.358E-02	0.000E+00
CM-243	6.191E-02	3.169E-02	4.615E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	1.946E-03	9.541E-03	1.619E-02	0.000E+00	NOT IDENT.
RH-101	-5.294E-03	1.231E-02	1.816E-02	0.000E+00	NOT IDENT.
SB-125	8.836E-03	2.460E-02	4.291E-02	0.000E+00	NOT IDENT.
PO-209	-4.244E-01	1.814E+00	3.110E+00	0.000E+00	NOT IDENT.
BI-211	3.255E-01	2.994E-01	4.730E-01	0.000E+00	NOT IDENT.
PA-233	-1.170E-02	1.708E-02	2.983E-02	0.000E+00	NOT IDENT.
NP-236	1.123E-02	1.934E-02	2.923E-02	0.000E+00	NOT IDENT.
NP-239	-2.613E-02	7.462E-02	1.117E-01	0.000E+00	NOT IDENT.
AM-241	1.552E-02	3.772E-02	6.098E-02	0.000E+00	NOT IDENT.
AM-246	1.807E-02	3.302E-02	5.743E-02	0.000E+00	NOT IDENT.
CF-249	1.399E-02	1.044E-02	1.885E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 02:57:58.71

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701022.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:36:50
Sample ID        : G198701022           Sample quantity  : 1.56220E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:04.96  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	1265	10.66*	1.997E+00	3.428E+00	3.428E+00	9.96
CS-137	661.66	455	85.10*	3.837E+00	8.033E-02	8.073E-02	18.42
EU-155	105.31	225	21.20*	9.142E+00	6.682E-02	6.881E-02	52.23
TL-208	277.36	161	6.31	6.710E+00	2.193E-01	2.193E-01	62.98
	510.77	301	22.60	4.633E+00	1.658E-01	1.658E-01	58.19
	583.19	1297	84.50*	4.220E+00	2.098E-01	2.098E-01	12.91
	763.13	------	1.81	3.420E+00	------	Line Not Found	------
	860.56	182	12.42	3.093E+00	2.734E-01	2.734E-01	47.33
BI-212	727.33	294	11.80*	3.559E+00	4.031E-01	4.031E-01	28.64
	785.37	65	1.10	3.341E+00	1.028E+00	1.028E+00	104.78
	1620.50	34	1.49	1.873E+00	6.927E-01	6.927E-01	110.50
PB-212	74.81	810	10.40	6.963E+00	6.452E-01	6.452E-01	19.71
	77.11	1502	17.50	7.262E+00	6.816E-01	6.816E-01	13.13
	87.30	596	7.81	8.277E+00	5.313E-01	5.313E-01	23.15
	238.63	3696	43.30*	7.279E+00	6.763E-01	6.763E-01	7.59
	300.09	292	3.28	6.422E+00	7.996E-01	7.996E-01	41.56
BI-214	609.31	2171	46.10*	4.085E+00	6.649E-01	6.650E-01	11.28
	768.36	172	4.94	3.404E+00	5.905E-01	5.905E-01	47.25
	806.17	------	1.22	3.268E+00	------	Line Not Found	------
	934.06	103	3.03	2.882E+00	6.778E-01	6.778E-01	69.58
	1120.29	500	15.10	2.461E+00	7.764E-01	7.764E-01	20.31
	1155.19	------	1.63	2.397E+00	------	Line Not Found	------
	1238.11	166	5.79	2.263E+00	7.314E-01	7.315E-01	38.69
	1280.96	------	1.43	2.201E+00	------	Line Not Found	------
	1377.67	132	4.00	2.082E+00	9.128E-01	9.128E-01	42.11
	1401.50	------	1.27	2.055E+00	------	Line Not Found	------
	1407.98	------	2.15	2.048E+00	------	Line Not Found	------
	1509.23	------	2.11	1.953E+00	------	Line Not Found	------
	1729.60	104	2.92	1.816E+00	1.133E+00	1.133E+00	46.34
	1764.49	543	15.40	1.801E+00	1.129E+00	1.129E+00	12.97
PB-214	74.81	810	6.44	6.963E+00	1.042E+00	1.042E+00	19.71
	77.11	1502	10.80	7.262E+00	1.105E+00	1.105E+00	13.13

Sample ID : G198701022 Acquisition date : 13-DEC-2007 18:36:50

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	596	4.84	8.277E+00	8.573E-01	8.574E-01	23.15
	242.00	1183	7.43	7.230E+00	1.269E+00	1.270E+00	14.89
	295.22	1526	19.30	6.483E+00	7.034E-01	7.035E-01	10.94
	351.93	2936	37.60*	5.862E+00	7.681E-01	7.682E-01	7.97
RA-223	269.46	322	13.70*	6.809E+00	1.994E-01	1.994E-01	44.34
AC-228	129.07	303	2.42	9.233E+00	7.811E-01	7.811E-01	59.77
	209.25	359	3.89	7.778E+00	6.839E-01	6.839E-01	43.74
	270.25	322	3.46	6.809E+00	7.894E-01	7.894E-01	44.34
	338.32	813	11.27	5.999E+00	6.935E-01	6.935E-01	17.68
	409.46	104	1.92	5.347E+00	5.839E-01	5.839E-01	92.47
	463.00	343	4.40	4.946E+00	9.079E-01	9.079E-01	29.85
	794.95	124	4.25	3.308E+00	5.092E-01	5.092E-01	56.67
	911.20	908	25.80*	2.944E+00	6.896E-01	6.896E-01	15.14
	964.77	185	4.99	2.801E+00	7.627E-01	7.627E-01	43.95
	968.97	631	15.80	2.791E+00	8.249E-01	8.249E-01	17.16
	1588.20	------	3.22	1.894E+00	------	Line Not Found	------
PA-234M	1001.03	104	0.84*	2.713E+00	2.635E+00	2.635E+00	89.91
TH-234	63.29	67	4.80	5.070E+00	1.586E-01	1.586E-01	221.81
	92.58	512	5.41*	8.651E+00	6.307E-01	6.307E-01	34.09
U-235	143.76	68	10.96*	9.051E+00	3.956E-02	3.956E-02	176.60
NP-237	86.48	596	12.40*	8.277E+00	3.346E-01	3.346E-01	23.15
AM-243	74.66	810	68.20*	6.963E+00	9.839E-02	9.840E-02	19.71
CM-243	103.76	225	23.00*	9.142E+00	6.159E-02	6.191E-02	52.23

Flag: "*" = Keyline

Sample ID : G198701022 Acquisition date : 13-DEC-2007 18:36:50

Total number of lines in spectrum 57
Number of unidentified lines 17
Number of lines tentatively identified by NID 40 70.18%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.428E+00	3.428E+00	0.341E+00	9.96	
CS-137	9.47E+08S	1.00	8.033E-02	8.073E-02	1.487E-02	18.42	
EU-155	1.57E+08S	1.03	6.682E-02	6.881E-02	3.594E-02	52.23	
TL-208	4.43E+17S	1.00	2.098E-01	2.098E-01	0.271E-01	12.91	
BI-212	4.43E+17S	1.00	4.031E-01	4.031E-01	1.154E-01	28.64	
PB-212	4.43E+17S	1.00	6.763E-01	6.763E-01	0.513E-01	7.59	
BI-214	5.05E+10S	1.00	6.649E-01	6.650E-01	0.750E-01	11.28	
PB-214	5.05E+10S	1.00	7.681E-01	7.682E-01	0.612E-01	7.97	
RA-223	1.04E+12S	1.00	1.994E-01	1.994E-01	0.884E-01	44.34	
AC-228	4.43E+17S	1.00	6.896E-01	6.896E-01	1.044E-01	15.14	
PA-234M	1.41E+17S	1.00	2.635E+00	2.635E+00	2.369E+00	89.91	
TH-234	1.41E+17S	1.00	6.307E-01	6.307E-01	2.150E-01	34.09	
U-235	2.22E+16S	1.00	3.956E-02	3.956E-02	6.986E-02	176.60	
NP-237	6.75E+13S	1.00	3.346E-01	3.346E-01	0.774E-01	23.15	
AM-243	2.33E+11S	1.00	9.839E-02	9.840E-02	1.940E-02	19.71	
CM-243	8.99E+08S	1.01	6.159E-02	6.191E-02	3.233E-02	52.23	
		Total Activity :	1.099E+01	1.099E+01			

Grand Total Activity : 1.099E+01 1.099E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701022 Acquisition date : 13-DEC-2007 18:36:50

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.06	38	813	1.27	105.57	103	6	1.26E-03	****	2.98E+00	
5	84.00	262	1921	1.64	167.42	162	29	8.75E-03	65.9	8.02E+00	
5	89.85	412	1225	1.22	179.12	162	29	1.37E-02	30.3	8.48E+00	
0	153.93	131	1269	1.50	307.22	303	9	4.37E-03	99.9	8.86E+00	
0	178.60	27	1077	0.67	356.54	352	8	8.88E-04	****	8.37E+00	
0	185.71	694	1575	1.50	370.74	365	11	2.31E-02	27.4	8.23E+00	
0	327.95	187	781	1.25	655.13	649	12	6.23E-03	61.6	6.10E+00	
0	535.98	38	217	1.53	1071.07	1067	7	1.27E-03	****	4.48E+00	
0	561.87	46	367	1.39	1122.84	1117	11	1.53E-03	****	4.33E+00	
0	568.70	17	298	0.82	1136.50	1134	9	5.54E-04	****	4.30E+00	
2	664.89	118	266	2.46	1328.85	1306	28	3.95E-03	60.2	3.82E+00	
0	703.73	36	390	1.95	1406.53	1396	13	1.21E-03	****	3.65E+00	
0	835.04	49	282	3.20	1669.13	1663	12	1.62E-03	****	3.17E+00	
0	1055.28	26	112	0.66	2109.65	2107	10	8.54E-04	****	2.59E+00	
0	1511.66	80	159	5.07	3022.70	3010	24	2.66E-03	89.9	1.95E+00	
0	1847.91	56	47	1.69	3695.58	3687	15	1.87E-03	70.1	1.77E+00	
0	1983.90	13	28	2.25	3967.77	3961	11	4.45E-04	****	1.75E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701022            *
* Acquisition date : 13-DEC-2007 18:36:50 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:04.96     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701022           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5622E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.428E+00	3.345E-01	6.999E-02	3.345E-01
CS-137	8.073E-02	1.457E-02	7.911E-03	1.457E-02
EU-155	6.881E-02	3.522E-02	2.561E-02	3.522E-02
TL-208	2.098E-01	2.654E-02	7.572E-03	2.654E-02
BI-212	4.031E-01	1.131E-01	5.948E-02	1.131E-01
PB-212	6.763E-01	5.030E-02	1.379E-02	5.030E-02
BI-214	6.650E-01	7.349E-02	1.609E-02	7.349E-02
PB-214	7.682E-01	5.999E-02	1.554E-02	5.999E-02
RA-223	1.994E-01	8.662E-02	4.362E-02	8.662E-02
AC-228	6.896E-01	1.023E-01	2.627E-02	1.023E-01
PA-234M	2.635E+00	2.322E+00	8.572E-01	2.322E+00
TH-234	6.307E-01	2.107E-01	1.048E-01	2.107E-01
U-235	3.956E-02	6.847E-02	4.997E-02	6.847E-02
NP-237	3.346E-01	7.590E-02	4.778E-02	7.590E-02
AM-243	9.840E-02	1.901E-02	1.180E-02	1.901E-02
CM-243	6.191E-02	3.169E-02	2.309E-02	3.169E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.946E-03	9.541E-03	8.102E-03	9.541E-03	NOT IDENT.
RH-101	-5.294E-03	1.231E-02	9.085E-03	1.231E-02	NOT IDENT.
SB-125	8.836E-03	2.460E-02	2.147E-02	2.460E-02	NOT IDENT.
PO-209	-4.244E-01	1.814E+00	1.556E+00	1.814E+00	NOT IDENT.
BI-211	3.255E-01	2.994E-01	2.367E-01	2.994E-01	NOT IDENT.
PA-233	-1.170E-02	1.708E-02	1.492E-02	1.708E-02	NOT IDENT.
NP-236	1.123E-02	1.934E-02	1.462E-02	1.934E-02	NOT IDENT.
NP-239	-2.613E-02	7.462E-02	5.588E-02	7.462E-02	NOT IDENT.
AM-241	1.552E-02	3.772E-02	3.051E-02	3.772E-02	NOT IDENT.
AM-246	1.807E-02	3.302E-02	2.873E-02	3.302E-02	NOT IDENT.
CF-249	1.399E-02	1.044E-02	9.431E-03	1.044E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	997.3427
63.29	1154.7142
74.66	1463.4518
74.81	1464.0139
74.81	1464.0139
77.11	1472.6085
77.11	1472.6085
86.48	1118.3037
87.30	1120.4290
87.30	1120.4290
92.58	1133.8951
98.44	1039.7874
103.76	1097.6619
105.31	1103.1643
129.07	1148.6456
143.76	1182.2950
198.00	1173.5594
209.25	1128.1346
228.18	1012.3708
238.63	932.9374
242.00	851.1381
269.46	825.8869
270.25	826.5480
277.36	808.7096
295.22	634.3233
300.09	685.1240
312.17	705.3123
338.32	634.3281
351.93	591.4188
387.59	512.3796
409.46	602.4796
427.87	485.1664
463.00	441.4209
510.77	425.8069
583.19	377.7143
609.31	476.8190
661.66	344.7038
727.33	327.3280
763.13	318.7805
768.36	293.9463
785.37	271.4273
794.95	271.4568
806.17	312.7835
831.80	267.4268
860.56	286.4113
896.60	262.5549
911.20	211.5479
934.06	230.4245
964.77	228.8200
968.97	229.1639
1001.03	203.7972
1078.86	198.9528
1120.29	200.5727
1155.19	162.8441
1173.23	179.5933
1238.11	177.1565
1280.96	160.2634
1332.51	167.4037
1377.67	160.1914
1401.50	197.1191
1407.98	158.9462
1460.80	121.0812
1509.23	139.7562
1588.20	151.7104
1620.50	100.8601
1729.60	85.2319
1764.49	92.7439

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701022

Total Uranium Activity	1.8305E-02	ug/g
Total Uranium Counting Unc.	3.1679E-02	ug/g
Total Uranium Tpu	3.1679E-08	ug/g
Total Uranium Mda	2.3119E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 03:00:23.52

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701023.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:37:12
Sample ID         : G198701023           Sample quantity  : 1.13440E+02 GRAM
Detector name     : GAM23                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00         Elapsed real time: 0 08:20:17.53  0.1%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708131               Detector SN#     :
Matrix Spike ID  :                       LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.24*	132	1133	0.96	126.44	122	10	4.40E-03	53.6	
2	0	74.66	455	1266	0.86	149.28	145	8	1.52E-02	14.3	
3	0	77.22*	969	931	0.86	154.39	152	7	3.23E-02	6.7	
4	0	81.31	79	622	1.40	162.57	161	5	2.63E-03	48.7	
5	0	84.30*	142	760	1.04	168.55	166	6	4.74E-03	37.0	
6	0	86.64	263	1084	1.05	173.23	172	7	8.77E-03	21.5	
7	4	89.96	306	378	0.84	179.88	178	18	1.02E-02	9.7	3.52E+00
8	4	92.89*	569	787	1.17	185.74	178	18	1.90E-02	11.1	
9	0	99.44	151	765	1.51	198.85	195	8	5.02E-03	32.8	
10	0	105.71	88	679	1.38	211.38	208	7	2.95E-03	50.0	
11	0	129.26	194	831	0.92	258.48	255	8	6.47E-03	26.8	
12	0	154.08	79	633	0.70	308.13	304	7	2.63E-03	54.0	
13	0	163.18	69	630	1.26	326.34	324	7	2.31E-03	61.3	
14	0	186.05*	300	844	0.97	372.08	368	9	9.98E-03	21.4	
15	0	209.11	338	687	1.07	418.20	414	9	1.13E-02	15.0	
16	4	238.67*	3047	489	1.00	477.34	473	16	1.02E-01	2.3	3.38E+00
17	4	241.50	533	621	1.63	482.99	473	16	1.78E-02	12.5	
18	0	270.44	276	543	1.23	540.88	536	10	9.20E-03	16.9	
19	1	277.38	202	418	1.28	554.77	548	15	6.74E-03	19.1	2.28E+00
20	1	279.87	44	355	1.22	559.77	548	15	1.48E-03	74.0	
21	2	295.22*	405	347	1.00	590.46	586	19	1.35E-02	11.1	2.61E+00
22	2	300.05	219	411	1.14	600.13	586	19	7.30E-03	16.4	
23	0	327.89	151	456	1.07	655.82	652	10	5.04E-03	27.6	
24	0	338.49	586	654	1.15	677.02	670	14	1.95E-02	10.1	
25	0	351.88*	861	538	1.05	703.81	698	12	2.87E-02	6.8	
26	0	409.65	173	391	1.60	819.38	815	12	5.78E-03	24.1	
27	0	439.60*	77	300	2.14	879.30	874	11	2.57E-03	50.8	
28	0	463.19	188	270	1.37	926.49	921	11	6.27E-03	18.5	
29	0	471.63	40	166	1.69	943.36	941	7	1.35E-03	54.8	
30	0	496.68	35	133	0.94	993.49	991	6	1.16E-03	55.2	
31	0	510.83*	225	454	1.78	1021.79	1015	15	7.49E-03	29.5	
32	0	562.24	76	209	1.84	1124.65	1120	10	2.54E-03	37.3	
33	0	583.05*	924	269	1.38	1166.27	1161	13	3.08E-02	5.5	
34	3	609.25*	621	186	1.63	1218.69	1212	23	2.07E-02	6.5	5.09E+00
35	3	614.11*	13	195	2.03	1228.41	1212	23	4.49E-04	268.4	
36	0	619.16	57	137	1.80	1238.52	1235	9	1.90E-03	39.3	
37	0	651.67	12	248	0.92	1303.56	1298	13	4.09E-04	267.1	
38	0	707.11	38	234	3.80	1414.48	1407	12	1.25E-03	84.1	

Sample ID : G198701023 Acquisition date : 13-DEC-2007 18:37:12

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	727.03	235	180	1.22	1454.34	1449	11	7.82E-03	12.9	
40	0	737.04	24	96	1.36	1474.37	1472	7	8.07E-04	70.6	
41	0	754.87	34	110	1.20	1510.03	1507	7	1.15E-03	53.5	
42	0	763.86	20	118	0.82	1528.02	1522	8	6.65E-04	97.0	
43	0	768.08	36	185	1.43	1536.46	1533	10	1.20E-03	72.6	
44	0	794.59	139	202	1.86	1589.51	1585	16	4.62E-03	24.2	
45	0	814.56	18	115	1.35	1629.46	1626	8	6.00E-04	105.5	
46	0	860.54	112	169	1.86	1721.47	1715	13	3.74E-03	25.8	
47	0	910.75*	627	139	1.73	1821.93	1813	19	2.09E-02	6.4	
48	0	934.66	52	121	3.02	1869.77	1862	13	1.72E-03	46.5	
49	2	964.39	118	152	2.19	1929.26	1921	24	3.92E-03	22.7	1.15E+00
50	2	968.78	356	93	1.59	1938.04	1921	24	1.19E-02	7.4	
51	0	1119.90	165	78	1.12	2240.42	2235	15	5.51E-03	13.7	
52	0	1214.87	25	109	4.24	2430.48	2422	18	8.19E-04	101.4	
53	0	1293.89	26	36	0.52	2588.62	2583	12	8.67E-04	50.1	
54	0	1303.52	29	58	0.61	2607.88	2599	14	9.68E-04	59.1	
55	0	1403.84	20	79	8.22	2808.65	2790	21	6.68E-04	112.9	
56	0	1407.32	41	36	3.95	2815.61	2810	14	1.36E-03	34.5	
57	0	1416.41	15	47	4.08	2833.80	2824	16	5.02E-04	105.9	
58	0	1460.12*	367	86	2.24	2921.28	2910	23	1.22E-02	8.8	
59	2	1583.82	32	31	2.66	3168.85	3165	26	1.08E-03	30.3	3.05E+00
60	2	1587.17	35	56	2.42	3175.56	3165	26	1.18E-03	50.1	
61	2	1592.09	48	42	2.66	3185.41	3165	26	1.61E-03	30.3	
62	0	1621.50	22	42	3.79	3244.27	3236	14	7.22E-04	67.0	
63	0	1673.93	24	25	8.10	3349.20	3339	20	7.92E-04	55.5	
64	0	1691.52	35	63	7.90	3384.41	3365	32	1.17E-03	70.6	
65	0	1704.85	11	28	4.83	3411.09	3401	14	3.67E-04	106.4	
66	0	1729.95	29	65	1.29	3461.33	3453	18	9.58E-04	67.6	
67	5	1763.71	117	35	2.46	3528.91	3521	26	3.91E-03	14.6	2.50E+00
68	5	1769.57*	8	36	2.48	3540.63	3521	26	2.63E-04	252.9	
69	0	1809.92	14	21	0.91	3621.39	3612	14	4.67E-04	74.4	
70	0	1818.39	24	38	3.76	3638.34	3627	22	8.05E-04	68.5	
71	0	1847.10	22	20	1.96	3695.81	3686	13	7.29E-04	46.9	
72	0	1927.19	8	10	1.28	3856.13	3849	10	2.67E-04	82.0	
73	0	1931.83	10	25	0.74	3865.42	3858	13	3.20E-04	108.7	
74	0	2021.48	19	23	0.79	4044.88	4038	17	6.21E-04	61.7	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701023       *
* Acquisition date : 13-DEC-2007 18:37:12 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:17.53     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701023           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.1344E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	2.634E+00	4.890E-01	2.448E-01	0.000E+00
EU-155	5.404E-02	5.307E-02	6.925E-02	0.000E+00
TL-208	3.708E-01	4.487E-02	2.621E-02	0.000E+00
BI-212	8.161E-01	2.133E-01	2.186E-01	0.000E+00
PB-212	1.172E+00	8.342E-02	4.194E-02	0.000E+00
BI-214	4.740E-01	6.598E-02	5.221E-02	0.000E+00
PB-214	5.155E-01	7.409E-02	5.094E-02	0.000E+00
RA-223	3.690E-01	1.244E-01	1.228E-01	0.000E+00
AC-228	1.222E+00	1.802E-01	9.287E-02	0.000E+00
TH-234	1.450E+00	3.318E-01	2.964E-01	0.000E+00
NP-236	5.165E-02	3.343E-02	3.577E-02	0.000E+00
NP-237	3.163E-01	1.350E-01	1.434E-01	0.000E+00
AM-243	1.283E-01	3.707E-02	3.782E-02	0.000E+00
CM-243	4.862E-02	4.775E-02	6.139E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	1.983E-02	1.597E-02	2.928E-02	0.000E+00	NOT IDENT.
RH-101	1.138E-03	1.790E-02	2.397E-02	0.000E+00	NOT IDENT.
SB-125	-2.962E-02	4.305E-02	7.036E-02	0.000E+00	NOT IDENT.
CS-137	4.637E-03	2.023E-02	3.073E-02	0.000E+00	NOT IDENT.
PO-209	9.506E-01	3.326E+00	5.603E+00	0.000E+00	NOT IDENT.
BI-211	-4.289E-01	5.296E-01	8.438E-01	0.000E+00	NOT IDENT.
PA-233	-8.041E-03	2.689E-02	4.613E-02	0.000E+00	NOT IDENT.
PA-234M	-6.091E-01	2.585E+00	3.363E+00	0.000E+00	NOT IDENT.
U-235	-5.421E-02	1.068E-01	1.368E-01	0.000E+00	NOT IDENT.
NP-239	-9.148E-02	9.420E-02	1.508E-01	0.000E+00	NOT IDENT.
AM-241	5.070E-03	7.128E-02	1.091E-01	0.000E+00	NOT IDENT.
AM-246	7.637E-03	5.260E-02	9.030E-02	0.000E+00	NOT IDENT.
CF-249	-1.558E-03	1.869E-02	3.168E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 03:00:27.39

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701023.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 13-DEC-2007 18:37:12
Sample ID        : G198701023           Sample quantity  : 1.13440E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 08:20:00.00        Elapsed real time: 0 08:20:17.53  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	367	10.66*	1.038E+00	2.634E+00	2.634E+00	18.95
EU-155	105.31	88	21.20*	6.315E+00	5.248E-02	5.404E-02	100.22
TL-208	277.36	202	6.31	4.253E+00	5.984E-01	5.984E-01	38.65
	510.77	225	22.60	2.614E+00	3.022E-01	3.022E-01	59.19
	583.19	924	84.50*	2.342E+00	3.708E-01	3.708E-01	12.35
	763.13	20	1.81	1.853E+00	4.723E-01	4.723E-01	194.07
	860.56	112	12.42	1.664E+00	4.313E-01	4.313E-01	52.25
BI-212	727.33	235	11.80*	1.936E+00	8.161E-01	8.161E-01	26.67
	785.37	------	1.10	1.807E+00	------	Line Not Found	------
	1620.50	22	1.49	9.593E-01	1.204E+00	1.204E+00	134.22
PB-212	74.81	455	10.40	4.130E+00	8.414E-01	8.414E-01	29.48
	77.11	969	17.50	4.425E+00	9.934E-01	9.934E-01	15.13
	87.30	263	7.81	5.325E+00	5.022E-01	5.022E-01	43.55
	238.63	3047	43.30*	4.766E+00	1.172E+00	1.172E+00	7.26
	300.09	219	3.28	4.001E+00	1.325E+00	1.325E+00	33.41
BI-214	609.31	621	46.10*	2.256E+00	4.739E-01	4.740E-01	14.20
	768.36	36	4.94	1.844E+00	3.139E-01	3.140E-01	145.41
	806.17	------	1.22	1.765E+00	------	Line Not Found	------
	934.06	52	3.03	1.543E+00	8.754E-01	8.755E-01	93.36
	1120.29	165	15.10	1.306E+00	6.656E-01	6.657E-01	28.04
	1155.19	------	1.63	1.270E+00	------	Line Not Found	------
	1238.11	------	5.79	1.193E+00	------	Line Not Found	------
	1280.96	------	1.43	1.158E+00	------	Line Not Found	------
	1377.67	------	4.00	1.088E+00	------	Line Not Found	------
	1401.50	------	1.27	1.073E+00	------	Line Not Found	------
	1407.98	41	2.15	1.069E+00	1.414E+00	1.414E+00	69.43
	1509.23	------	2.11	1.011E+00	------	Line Not Found	------
	1729.60	29	2.92	9.195E-01	8.502E-01	8.503E-01	135.34
	1764.49	117	15.40	9.090E-01	6.655E-01	6.656E-01	29.87
PB-214	74.81	455	6.44	4.130E+00	1.359E+00	1.359E+00	29.48
	77.11	969	10.80	4.425E+00	1.610E+00	1.610E+00	15.13
	87.30	263	4.84	5.325E+00	8.103E-01	8.104E-01	43.55

Sample ID : G198701023 Acquisition date : 13-DEC-2007 18:37:12

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	533	7.43	4.725E+00	1.207E+00	1.207E+00	25.54
	295.22	405	19.30	4.052E+00	4.108E-01	4.109E-01	23.06
	351.93	861	37.60*	3.529E+00	5.155E-01	5.155E-01	14.67
RA-223	269.46	276	13.70*	4.337E+00	3.690E-01	3.690E-01	34.40
AC-228	129.07	194	2.42	6.528E+00	9.760E-01	9.760E-01	53.98
	209.25	338	3.89	5.239E+00	1.318E+00	1.318E+00	30.56
	270.25	276	3.46	4.337E+00	1.461E+00	1.461E+00	34.40
	338.32	586	11.27	3.640E+00	1.134E+00	1.134E+00	21.03
	409.46	173	1.92	3.127E+00	2.292E+00	2.292E+00	48.45
	463.00	188	4.40	2.832E+00	1.199E+00	1.199E+00	37.29
	794.95	139	4.25	1.788E+00	1.448E+00	1.448E+00	48.92
	911.20	627	25.80*	1.580E+00	1.222E+00	1.222E+00	15.05
	964.77	118	4.99	1.499E+00	1.248E+00	1.248E+00	46.01
	968.97	356	15.80	1.493E+00	1.200E+00	1.200E+00	16.74
	1588.20	35	3.22	9.739E-01	8.949E-01	8.949E-01	100.35
TH-234	63.29	132	4.80	2.621E+00	8.331E-01	8.331E-01	107.45
	92.58	569	5.41*	5.763E+00	1.450E+00	1.450E+00	23.36
NP-236	98.44	151	38.00*	6.097E+00	5.165E-02	5.165E-02	66.05
NP-237	86.48	263	12.40*	5.325E+00	3.163E-01	3.163E-01	43.55
AM-243	74.66	455	68.20*	4.130E+00	1.283E-01	1.283E-01	29.48
CM-243	103.76	88	23.00*	6.315E+00	4.837E-02	4.862E-02	100.22

Flag: "*" = Keyline

Sample ID : G198701023 Acquisition date : 13-DEC-2007 18:37:12

Total number of lines in spectrum 74
Number of unidentified lines 36
Number of lines tentatively identified by NID 38 51.35%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	2.634E+00	2.634E+00	0.499E+00	18.95	
EU-155	1.57E+08S	1.03	5.248E-02	5.404E-02	5.416E-02	100.22	
TL-208	4.43E+17S	1.00	3.708E-01	3.708E-01	0.458E-01	12.35	
BI-212	4.43E+17S	1.00	8.161E-01	8.161E-01	2.176E-01	26.67	
PB-212	4.43E+17S	1.00	1.172E+00	1.172E+00	0.085E+00	7.26	
BI-214	5.05E+10S	1.00	4.739E-01	4.740E-01	0.673E-01	14.20	
PB-214	5.05E+10S	1.00	5.155E-01	5.155E-01	0.756E-01	14.67	
RA-223	1.04E+12S	1.00	3.690E-01	3.690E-01	1.269E-01	34.40	
AC-228	4.43E+17S	1.00	1.222E+00	1.222E+00	0.184E+00	15.05	
TH-234	1.41E+17S	1.00	1.450E+00	1.450E+00	0.339E+00	23.36	
NP-236	4.89E+12S	1.00	5.165E-02	5.165E-02	3.412E-02	66.05	
NP-237	6.75E+13S	1.00	3.163E-01	3.163E-01	1.377E-01	43.55	
AM-243	2.33E+11S	1.00	1.283E-01	1.283E-01	0.378E-01	29.48	
CM-243	8.99E+08S	1.01	4.837E-02	4.862E-02	4.872E-02	100.22	
			---	---			
	Total Activity :		9.620E+00	9.622E+00			

Grand Total Activity : 9.620E+00 9.622E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701023 Acquisition date : 13-DEC-2007 18:37:12

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	81.31	79	622	1.40	162.57	161	5	2.63E-03	97.3	4.85E+00	
0	84.30	142	760	1.04	168.55	166	6	4.74E-03	73.9	5.13E+00	
4	89.96	306	378	0.84	179.88	178	18	1.02E-02	19.3	5.57E+00	
0	154.08	79	633	0.70	308.13	304	7	2.63E-03	****	6.23E+00	
0	163.18	69	630	1.26	326.34	324	7	2.31E-03	****	6.08E+00	
0	186.05	300	844	0.97	372.08	368	9	9.98E-03	42.8	5.65E+00	
1	279.87	44	355	1.22	559.77	548	15	1.48E-03	****	4.22E+00	
0	327.89	151	456	1.07	655.82	652	10	5.04E-03	55.1	3.73E+00	
0	439.60	77	300	2.14	879.30	874	11	2.57E-03	****	2.95E+00	
0	471.63	40	166	1.69	943.36	941	7	1.35E-03	****	2.79E+00	
0	496.68	35	133	0.94	993.49	991	6	1.16E-03	****	2.68E+00	
0	562.24	76	209	1.84	1124.65	1120	10	2.54E-03	74.5	2.41E+00	
3	614.11	13	195	2.03	1228.41	1212	23	4.49E-04	****	2.24E+00	
0	619.16	57	137	1.80	1238.52	1235	9	1.90E-03	78.6	2.23E+00	
0	651.67	12	248	0.92	1303.56	1298	13	4.09E-04	****	2.13E+00	
0	707.11	38	234	3.80	1414.48	1407	12	1.25E-03	****	1.98E+00	
0	737.04	24	96	1.36	1474.37	1472	7	8.07E-04	****	1.91E+00	
0	754.87	34	110	1.20	1510.03	1507	7	1.15E-03	****	1.87E+00	
0	814.56	18	115	1.35	1629.46	1626	8	6.00E-04	****	1.75E+00	
0	1214.87	25	109	4.24	2430.48	2422	18	8.19E-04	****	1.21E+00	
0	1293.89	26	36	0.52	2588.62	2583	12	8.67E-04	****	1.15E+00	
0	1303.52	29	58	0.61	2607.88	2599	14	9.68E-04	****	1.14E+00	
0	1403.84	20	79	8.22	2808.65	2790	21	6.68E-04	****	1.07E+00	
0	1416.41	15	47	4.08	2833.80	2824	16	5.02E-04	****	1.06E+00	
2	1583.82	32	31	2.66	3168.85	3165	26	1.08E-03	60.7	9.75E-01	
2	1592.09	48	42	2.66	3185.41	3165	26	1.61E-03	60.6	9.72E-01	
0	1673.93	24	25	8.10	3349.20	3339	20	7.92E-04	****	9.39E-01	
0	1691.52	35	63	7.90	3384.41	3365	32	1.17E-03	****	9.33E-01	
0	1704.85	11	28	4.83	3411.09	3401	14	3.67E-04	****	9.28E-01	
5	1769.57	8	36	2.48	3540.63	3521	26	2.63E-04	****	9.07E-01	
0	1809.92	14	21	0.91	3621.39	3612	14	4.67E-04	****	8.96E-01	
0	1818.39	24	38	3.76	3638.34	3627	22	8.05E-04	****	8.94E-01	
0	1847.10	22	20	1.96	3695.81	3686	13	7.29E-04	93.8	8.86E-01	
0	1927.19	8	10	1.28	3856.13	3849	10	2.67E-04	****	8.69E-01	
0	1931.83	10	25	0.74	3865.42	3858	13	3.20E-04	****	8.68E-01	
0	2021.48	19	23	0.79	4044.88	4038	17	6.21E-04	****	8.53E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701023            *
* Acquisition date : 13-DEC-2007 18:37:12 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 08:20:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 08:20:17.53     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701023           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.1344E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	2.634E+00	4.890E-01	1.225E-01	4.890E-01
EU-155	5.404E-02	5.307E-02	3.464E-02	5.307E-02
TL-208	3.708E-01	4.487E-02	1.311E-02	4.487E-02
BI-212	8.161E-01	2.133E-01	1.093E-01	2.133E-01
PB-212	1.172E+00	8.342E-02	2.098E-02	8.342E-02
BI-214	4.740E-01	6.598E-02	2.612E-02	6.598E-02
PB-214	5.155E-01	7.409E-02	2.549E-02	7.409E-02
RA-223	3.690E-01	1.244E-01	6.144E-02	1.244E-01
AC-228	1.222E+00	1.802E-01	4.646E-02	1.802E-01
TH-234	1.450E+00	3.318E-01	1.483E-01	3.318E-01
NP-236	5.165E-02	3.343E-02	1.789E-02	3.343E-02
NP-237	3.163E-01	1.350E-01	7.173E-02	1.350E-01
AM-243	1.283E-01	3.707E-02	1.892E-02	3.707E-02
CM-243	4.862E-02	4.775E-02	3.071E-02	4.775E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.983E-02	1.597E-02	1.465E-02	1.597E-02	NOT IDENT.
RH-101	1.138E-03	1.790E-02	1.199E-02	1.790E-02	NOT IDENT.
SB-125	-2.962E-02	4.305E-02	3.520E-02	4.305E-02	NOT IDENT.
CS-137	4.637E-03	2.023E-02	1.537E-02	2.023E-02	NOT IDENT.
PO-209	9.506E-01	3.326E+00	2.803E+00	3.326E+00	NOT IDENT.
BI-211	-4.289E-01	5.296E-01	4.221E-01	5.296E-01	NOT IDENT.
PA-233	-8.041E-03	2.689E-02	2.308E-02	2.689E-02	NOT IDENT.
PA-234M	-6.091E-01	2.585E+00	1.682E+00	2.585E+00	NOT IDENT.
U-235	-5.421E-02	1.068E-01	6.845E-02	1.068E-01	NOT IDENT.
NP-239	-9.148E-02	9.420E-02	7.545E-02	9.420E-02	NOT IDENT.
AM-241	5.070E-03	7.128E-02	5.458E-02	7.128E-02	NOT IDENT.
AM-246	7.637E-03	5.260E-02	4.518E-02	5.260E-02	NOT IDENT.
CF-249	-1.558E-03	1.869E-02	1.585E-02	1.869E-02	NOT IDENT.

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	469.3703
63.29	533.0479
74.66	796.8170
74.81	797.1982
74.81	797.1982
77.11	778.5637
77.11	778.5637
86.48	628.1166
87.30	896.5294
87.30	896.5294
92.58	598.0004
98.44	477.5953
103.76	545.4933
105.31	570.4838
129.07	578.9783
143.76	601.2264
198.00	552.3524
209.25	553.0519
228.18	518.4985
238.63	536.8206
242.00	539.1594
269.46	384.4622
270.25	402.1555
277.36	387.3063
295.22	395.8372
300.09	397.9307
312.17	358.5715
338.32	331.7944
351.93	329.5439
387.59	341.3376
409.46	279.1863
427.87	292.4913
463.00	243.5558
510.77	245.6240
583.19	195.6385
609.31	214.7416
661.66	193.0183
727.33	181.9727
763.13	155.4771
768.36	183.3499
785.37	138.4245
794.95	148.1233
806.17	157.0056
831.80	197.8061
860.56	138.0719
896.60	121.2526
911.20	105.0256
934.06	111.3760
964.77	117.0993
968.97	117.2944
1001.03	91.2757
1078.86	81.1254
1120.29	82.3222
1155.19	83.3125
1173.23	63.3523
1238.11	90.5853
1280.96	69.6149
1332.51	53.2886
1377.67	50.8842
1401.50	62.7344
1407.98	31.4258
1460.80	54.2145
1509.23	71.0837
1588.20	58.4256
1620.50	50.3530
1729.60	35.1173
1764.49	39.3387

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701023

Total Uranium Activity	-2.5081E-02	ug/g
Total Uranium Counting Unc.	4.9422E-02	ug/g
Total Uranium Tpu	4.9422E-08	ug/g
Total Uranium Mda	3.1672E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:11:25.85

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701024.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 05:10:35
Sample ID        : G198701024           Sample quantity  : 1.42160E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:23.99  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.65	93	592	0.77	92.41	87	10	6.45E-03	50.3	
2	0	63.61	232	937	1.11	126.27	121	11	1.61E-02	26.4	
3	3	74.95	1081	1035	1.86	148.92	143	17	7.50E-02	6.8	3.63E+00
4	3	77.31*	1497	673	1.37	153.63	143	17	1.04E-01	4.2	
5	3	84.35	181	781	1.88	167.69	163	29	1.25E-02	27.9	1.02E+00
6	3	87.27	533	651	1.39	173.52	163	29	3.70E-02	9.3	
7	3	89.97	346	748	1.63	178.91	163	29	2.41E-02	16.9	
8	3	92.89*	518	761	1.81	184.75	163	29	3.60E-02	12.2	
9	0	105.49	123	630	1.86	209.90	207	10	8.56E-03	39.0	
10	1	109.68	76	271	1.49	218.29	216	19	5.24E-03	34.4	3.01E+00
11	1	115.90	74	410	1.60	230.71	216	19	5.13E-03	50.1	
12	0	129.16	160	735	2.83	257.19	251	12	1.11E-02	34.8	
13	0	153.97	88	603	1.07	306.75	302	10	6.11E-03	53.2	
14	0	186.35*	329	633	1.64	371.43	364	12	2.29E-02	16.8	
15	0	209.19	218	576	1.49	417.05	412	13	1.51E-02	23.7	
16	2	238.62*	1862	297	1.45	475.85	467	23	1.29E-01	3.0	2.08E+00
17	2	241.68	512	321	1.91	481.96	467	23	3.56E-02	10.7	
18	0	260.12	67	230	1.04	518.79	515	9	4.68E-03	42.9	
19	0	263.10*	8	224	1.34	524.74	524	8	5.34E-04	364.1	
20	0	270.20	167	376	1.57	538.92	534	12	1.16E-02	24.5	
21	0	278.12	66	437	2.87	554.74	549	13	4.59E-03	66.6	
22	0	295.22*	670	387	1.50	588.92	582	14	4.65E-02	7.4	
23	0	300.04	111	274	1.48	598.55	596	10	7.71E-03	29.4	
24	0	327.80	112	278	1.88	654.00	648	13	7.81E-03	31.9	
25	0	338.43	291	334	1.36	675.25	670	13	2.02E-02	14.3	
26	0	352.02*	1024	364	1.44	702.40	694	16	7.11E-02	5.3	
27	0	409.30	81	201	3.59	816.86	811	13	5.63E-03	37.7	
28	0	462.45	104	218	1.76	923.07	918	16	7.20E-03	33.2	
29	0	472.66	21	93	1.61	943.48	942	8	1.44E-03	82.6	
30	0	510.91*	174	200	2.00	1019.94	1013	18	1.21E-02	23.7	
31	0	568.37	132	267	2.60	1134.78	1123	23	9.16E-03	33.5	
32	0	583.11*	471	153	1.56	1164.24	1155	16	3.27E-02	7.6	
33	0	609.41*	743	118	1.78	1216.82	1210	16	5.16E-02	5.1	
34	0	663.97	74	166	3.74	1325.89	1316	20	5.15E-03	44.5	
35	0	727.58	103	90	1.32	1453.07	1446	13	7.12E-03	21.6	
36	0	756.51	53	73	2.35	1510.92	1503	13	3.67E-03	36.4	
37	0	768.53	56	59	1.02	1534.95	1531	9	3.85E-03	28.2	
38	0	773.59*	31	73	1.50	1545.07	1540	13	2.13E-03	66.1	

Sample ID : G198701024 Acquisition date : 14-DEC-2007 05:10:35

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	786.34	23	74	1.54	1570.56	1563	10	1.59E-03	73.5	
40	0	795.07	85	89	1.75	1588.03	1581	16	5.91E-03	27.0	
41	0	843.33	13	50	1.16	1684.54	1680	7	8.83E-04	98.8	
42	0	860.87	61	46	1.63	1719.60	1715	10	4.26E-03	24.5	
43	0	911.19	283	56	1.84	1820.26	1814	13	1.97E-02	8.0	
44	0	934.51	38	67	1.33	1866.89	1860	12	2.67E-03	46.0	
45	4	964.41	82	51	2.90	1926.70	1919	24	5.69E-03	22.7	5.30E-01
46	4	968.99	184	41	2.14	1935.87	1919	24	1.28E-02	10.8	
47	0	1120.57*	120	69	1.41	2239.12	2231	14	8.35E-03	17.8	
48	0	1201.77	49	33	4.32	2401.60	2394	15	3.41E-03	29.4	
49	0	1238.80	50	33	1.10	2475.70	2471	10	3.49E-03	26.0	
50	1	1376.34*	14	34	2.14	2751.00	2743	21	9.51E-04	97.0	2.25E+00
51	1	1378.56*	20	34	2.35	2755.43	2743	21	1.38E-03	72.0	
52	0	1460.84*	509	45	2.31	2920.16	2912	18	3.53E-02	5.5	
53	0	1488.16	22	4	0.97	2974.86	2968	14	1.49E-03	28.4	
54	0	1530.90	15	14	1.86	3060.43	3054	11	1.02E-03	58.5	
55	1	1587.89	32	17	2.43	3174.56	3164	29	2.20E-03	36.2	1.08E+00
56	1	1592.83	40	20	2.43	3184.44	3164	29	2.78E-03	29.6	
57	0	1612.30	5	15	3.46	3223.44	3213	12	3.66E-04	152.8	
58	0	1661.97	18	14	0.75	3322.91	3318	11	1.28E-03	47.9	
59	0	1684.98	8	9	0.47	3369.00	3363	11	5.74E-04	76.2	
60	0	1697.86	7	1	1.13	3394.80	3392	6	4.69E-04	47.4	
61	0	1730.78	17	30	1.57	3460.73	3452	17	1.16E-03	78.8	
62	0	1752.95	8	15	3.59	3505.13	3496	12	5.50E-04	104.2	
63	0	1764.65	112	5	2.96	3528.57	3522	16	7.80E-03	10.3	
64	0	1842.09	9	13	1.41	3683.71	3676	11	5.90E-04	90.2	
65	0	1985.83	12	3	3.70	3971.73	3965	12	8.52E-04	39.9	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701024       *
* Acquisition date : 14-DEC-2007 05:10:35 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:23.99     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701024           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4216E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	8.480E+00	1.028E+00	4.990E-01	0.000E+00
EU-155	9.718E-02	7.477E-02	9.085E-02	0.000E+00
TL-208	3.922E-01	6.474E-02	4.207E-02	0.000E+00
BI-212	7.719E-01	3.318E-01	3.588E-01	0.000E+00
PB-212	1.206E+00	1.006E-01	6.117E-02	0.000E+00
BI-214	1.189E+00	1.483E-01	8.556E-02	0.000E+00
PB-214	1.122E+00	1.301E-01	7.791E-02	0.000E+00
RA-223	3.846E-01	1.854E-01	2.081E-01	0.000E+00
AC-228	1.227E+00	2.098E-01	1.775E-01	0.000E+00
TH-234	1.498E+00	3.755E-01	3.697E-01	0.000E+00
NP-237	6.649E-01	1.308E-01	1.590E-01	0.000E+00
AM-243	2.420E-01	3.614E-02	3.267E-02	0.000E+00
CM-243	8.742E-02	6.726E-02	8.456E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	3.782E-02	3.061E-02	5.709E-02	0.000E+00	NOT IDENT.
RH-101	1.304E-02	2.201E-02	3.827E-02	0.000E+00	NOT IDENT.
SB-125	3.328E-03	6.460E-02	1.114E-01	0.000E+00	NOT IDENT.
CS-137	4.926E-02	2.852E-02	5.431E-02	0.000E+00	NOT IDENT.
PO-209	-5.459E-01	5.324E+00	9.049E+00	0.000E+00	NOT IDENT.
BI-211	-5.593E-01	7.732E-01	1.257E+00	0.000E+00	NOT IDENT.
PA-233	1.525E-02	4.175E-02	7.424E-02	0.000E+00	NOT IDENT.
PA-234M	1.616E+00	3.349E+00	5.918E+00	0.000E+00	NOT IDENT.
U-235	1.264E-01	1.223E-01	2.165E-01	0.000E+00	NOT IDENT.
NP-236	2.282E-02	3.253E-02	5.118E-02	0.000E+00	NOT IDENT.
NP-239	-7.323E-02	1.389E-01	2.430E-01	0.000E+00	NOT IDENT.
AM-241	-5.056E-04	3.494E-02	5.469E-02	0.000E+00	NOT IDENT.
AM-246	-7.166E-02	1.054E-01	1.671E-01	0.000E+00	NOT IDENT.
CF-249	1.152E-02	2.770E-02	4.887E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:11:26.87

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701024.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 05:10:35
Sample ID        : G198701024           Sample quantity  : 1.42160E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:23.99  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	509	10.66*	7.434E-01	8.480E+00	8.480E+00	12.37
EU-155	105.31	123	21.20*	8.134E+00	9.435E-02	9.718E-02	78.51
TL-208	277.36	66	6.31	4.069E+00	3.402E-01	3.402E-01	133.24
	510.77	174	22.60	2.159E+00	4.720E-01	4.720E-01	47.80
	583.19	471	84.50*	1.875E+00	3.922E-01	3.922E-01	16.84
	763.13	------	1.81	1.415E+00	------	Line Not Found	------
	860.56	61	12.42	1.251E+00	5.208E-01	5.208E-01	49.56
BI-212	727.33	103	11.80*	1.486E+00	7.719E-01	7.719E-01	43.86
	785.37	23	1.10	1.372E+00	2.009E+00	2.009E+00	147.14
	1620.50	------	1.49	6.722E-01	------	Line Not Found	------
PB-212	74.81	1081	10.40	8.644E+00	1.587E+00	1.587E+00	15.24
	77.11	1497	17.50	8.639E+00	1.308E+00	1.308E+00	10.98
	87.30	533	7.81	8.537E+00	1.056E+00	1.056E+00	20.07
	238.63	1862	43.30*	4.708E+00	1.206E+00	1.206E+00	8.51
	300.09	111	3.28	3.773E+00	1.184E+00	1.184E+00	59.09
BI-214	609.31	743	46.10*	1.790E+00	1.189E+00	1.189E+00	12.73
	768.36	56	4.94	1.405E+00	1.056E+00	1.056E+00	57.02
	806.17	------	1.22	1.337E+00	------	Line Not Found	------
	934.06	38	3.03	1.151E+00	1.453E+00	1.453E+00	92.24
	1120.29	120	15.10	9.617E-01	1.094E+00	1.094E+00	36.05
	1155.19	------	1.63	9.335E-01	------	Line Not Found	------
	1238.11	50	5.79	8.721E-01	1.313E+00	1.313E+00	52.30
	1280.96	------	1.43	8.442E-01	------	Line Not Found	------
	1377.67	20	4.00	7.863E-01	8.315E-01	8.316E-01	144.14
	1401.50	------	1.27	7.738E-01	------	Line Not Found	------
	1407.98	------	2.15	7.704E-01	------	Line Not Found	------
	1509.23	------	2.11	7.203E-01	------	Line Not Found	------
	1729.60	17	2.92	6.303E-01	1.199E+00	1.199E+00	157.70
	1764.49	112	15.40	6.184E-01	1.557E+00	1.557E+00	21.30
PB-214	74.81	1081	6.44	8.644E+00	2.563E+00	2.563E+00	15.24
	77.11	1497	10.80	8.639E+00	2.119E+00	2.119E+00	10.98
	87.30	533	4.84	8.537E+00	1.704E+00	1.704E+00	20.07

Sample ID : G198701024 Acquisition date : 14-DEC-2007 05:10:35

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	512	7.43	4.653E+00	1.957E+00	1.957E+00	22.31
	295.22	670	19.30	3.835E+00	1.195E+00	1.195E+00	15.74
	351.93	1024	37.60*	3.204E+00	1.122E+00	1.122E+00	11.83
RA-223	269.46	167	13.70*	4.185E+00	3.846E-01	3.846E-01	49.20
AC-228	129.07	160	2.42	7.442E+00	1.175E+00	1.175E+00	70.10
	209.25	218	3.89	5.294E+00	1.395E+00	1.395E+00	47.87
	270.25	167	3.46	4.185E+00	1.523E+00	1.523E+00	49.20
	338.32	291	11.27	3.338E+00	1.021E+00	1.021E+00	29.02
	409.46	81	1.92	2.734E+00	2.039E+00	2.039E+00	75.67
	463.00	104	4.40	2.401E+00	1.296E+00	1.296E+00	66.66
	794.95	85	4.25	1.356E+00	1.949E+00	1.949E+00	54.45
	911.20	283	25.80*	1.181E+00	1.227E+00	1.227E+00	17.44
	964.77	82	4.99	1.116E+00	1.943E+00	1.943E+00	45.89
	968.97	184	15.80	1.110E+00	1.385E+00	1.385E+00	22.57
	1588.20	32	3.22	6.857E-01	1.893E+00	1.893E+00	72.60
TH-234	63.29	232	4.80	8.522E+00	7.477E-01	7.477E-01	53.23
	92.58	518	5.41*	8.435E+00	1.498E+00	1.498E+00	25.57
NP-237	86.48	533	12.40*	8.537E+00	6.649E-01	6.649E-01	20.07
AM-243	74.66	1081	68.20*	8.644E+00	2.420E-01	2.420E-01	15.24
CM-243	103.76	123	23.00*	8.134E+00	8.697E-02	8.742E-02	78.51

Flag: "*" = Keyline

Sample ID : G198701024 Acquisition date : 14-DEC-2007 05:10:35

Total number of lines in spectrum 65
Number of unidentified lines 28
Number of lines tentatively identified by NID 37 56.92%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	8.480E+00	8.480E+00	1.049E+00	12.37	
EU-155	1.57E+08S	1.03	9.435E-02	9.718E-02	7.630E-02	78.51	
TL-208	4.43E+17S	1.00	3.922E-01	3.922E-01	0.661E-01	16.84	
BI-212	4.43E+17S	1.00	7.719E-01	7.719E-01	3.386E-01	43.86	
PB-212	4.43E+17S	1.00	1.206E+00	1.206E+00	0.103E+00	8.51	
BI-214	5.05E+10S	1.00	1.189E+00	1.189E+00	0.151E+00	12.73	
PB-214	5.05E+10S	1.00	1.122E+00	1.122E+00	0.133E+00	11.83	
RA-223	1.04E+12S	1.00	3.846E-01	3.846E-01	1.892E-01	49.20	
AC-228	4.43E+17S	1.00	1.227E+00	1.227E+00	0.214E+00	17.44	
TH-234	1.41E+17S	1.00	1.498E+00	1.498E+00	0.383E+00	25.57	
NP-237	6.75E+13S	1.00	6.649E-01	6.649E-01	1.334E-01	20.07	
AM-243	2.33E+11S	1.00	2.420E-01	2.420E-01	0.369E-01	15.24	
CM-243	8.99E+08S	1.01	8.697E-02	8.742E-02	6.863E-02	78.51	
			---	---			
	Total Activity :		1.736E+01	1.736E+01			

Grand Total Activity : 1.736E+01 1.736E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701024 Acquisition date : 14-DEC-2007 05:10:35

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.65	93	592	0.77	92.41	87	10	6.45E-03	****	7.66E+00	
3	84.35	181	781	1.88	167.69	163	29	1.25E-02	55.8	8.58E+00	
3	89.97	346	748	1.63	178.91	163	29	2.41E-02	33.7	8.49E+00	
1	109.68	76	271	1.49	218.29	216	19	5.24E-03	68.9	8.02E+00	
1	115.90	74	410	1.60	230.71	216	19	5.13E-03	****	7.84E+00	
0	153.97	88	603	1.07	306.75	302	10	6.11E-03	****	6.70E+00	
0	186.35	329	633	1.64	371.43	364	12	2.29E-02	33.5	5.83E+00	
0	260.12	67	230	1.04	518.79	515	9	4.68E-03	85.7	4.34E+00	
0	263.10	8	224	1.34	524.74	524	8	5.34E-04	****	4.29E+00	
0	327.80	112	278	1.88	654.00	648	13	7.81E-03	63.8	3.45E+00	
0	472.66	21	93	1.61	943.48	942	8	1.44E-03	****	2.35E+00	
0	568.37	132	267	2.60	1134.78	1123	23	9.16E-03	67.0	1.93E+00	
0	663.97	74	166	3.74	1325.89	1316	20	5.15E-03	89.0	1.64E+00	
0	756.51	53	73	2.35	1510.92	1503	13	3.67E-03	72.8	1.43E+00	
0	773.59	31	73	1.50	1545.07	1540	13	2.13E-03	****	1.40E+00	
0	843.33	13	50	1.16	1684.54	1680	7	8.83E-04	****	1.28E+00	
0	1201.77	49	33	4.32	2401.60	2394	15	3.41E-03	58.9	8.98E-01	
1	1376.34	14	34	2.14	2751.00	2743	21	9.51E-04	****	7.87E-01	
0	1488.16	22	4	0.97	2974.86	2968	14	1.49E-03	56.8	7.30E-01	
0	1530.90	15	14	1.86	3060.43	3054	11	1.02E-03	****	7.10E-01	
1	1592.83	40	20	2.43	3184.44	3164	29	2.78E-03	59.2	6.84E-01	
0	1612.30	5	15	3.46	3223.44	3213	12	3.66E-04	****	6.76E-01	
0	1661.97	18	14	0.75	3322.91	3318	11	1.28E-03	95.7	6.56E-01	
0	1684.98	8	9	0.47	3369.00	3363	11	5.74E-04	****	6.47E-01	
0	1697.86	7	1	1.13	3394.80	3392	6	4.69E-04	94.9	6.42E-01	
0	1752.95	8	15	3.59	3505.13	3496	12	5.50E-04	****	6.23E-01	
0	1842.09	9	13	1.41	3683.71	3676	11	5.90E-04	****	5.93E-01	
0	1985.83	12	3	3.70	3971.73	3965	12	8.52E-04	79.9	5.50E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701024            *
* Acquisition date : 14-DEC-2007 05:10:35 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:23.99     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701024           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4216E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	8.480E+00	1.028E+00	2.496E-01	1.028E+00
EU-155	9.718E-02	7.477E-02	4.545E-02	7.477E-02
TL-208	3.922E-01	6.474E-02	2.105E-02	6.474E-02
BI-212	7.719E-01	3.318E-01	1.795E-01	3.318E-01
PB-212	1.206E+00	1.006E-01	3.060E-02	1.006E-01
BI-214	1.189E+00	1.483E-01	4.280E-02	1.483E-01
PB-214	1.122E+00	1.301E-01	3.898E-02	1.301E-01
RA-223	3.846E-01	1.854E-01	1.041E-01	1.854E-01
AC-228	1.227E+00	2.098E-01	8.878E-02	2.098E-01
TH-234	1.498E+00	3.755E-01	1.850E-01	3.755E-01
NP-237	6.649E-01	1.308E-01	7.955E-02	1.308E-01
AM-243	2.420E-01	3.614E-02	1.635E-02	3.614E-02
CM-243	8.742E-02	6.726E-02	4.231E-02	6.726E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	3.782E-02	3.061E-02	2.856E-02	3.061E-02	NOT IDENT.
RH-101	1.304E-02	2.201E-02	1.915E-02	2.201E-02	NOT IDENT.
SB-125	3.328E-03	6.460E-02	5.573E-02	6.460E-02	NOT IDENT.
CS-137	4.926E-02	2.852E-02	2.717E-02	2.852E-02	NOT IDENT.
PO-209	-5.459E-01	5.324E+00	4.527E+00	5.324E+00	NOT IDENT.
BI-211	-5.593E-01	7.732E-01	6.290E-01	7.732E-01	NOT IDENT.
PA-233	1.525E-02	4.175E-02	3.714E-02	4.175E-02	NOT IDENT.
PA-234M	1.616E+00	3.349E+00	2.961E+00	3.349E+00	NOT IDENT.
U-235	1.264E-01	1.223E-01	1.083E-01	1.223E-01	NOT IDENT.
NP-236	2.282E-02	3.253E-02	2.561E-02	3.253E-02	NOT IDENT.
NP-239	-7.323E-02	1.389E-01	1.216E-01	1.389E-01	NOT IDENT.
AM-241	-5.056E-04	3.494E-02	2.736E-02	3.494E-02	NOT IDENT.
AM-246	-7.166E-02	1.054E-01	8.361E-02	1.054E-01	NOT IDENT.
CF-249	1.152E-02	2.770E-02	2.445E-02	2.770E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	627.1594
63.29	728.5944
74.66	861.3846
74.81	861.5227
74.81	861.5227
77.11	863.6384
77.11	863.6384
86.48	663.6511
87.30	664.1886
87.30	664.1886
92.58	667.5859
98.44	559.0450
103.76	589.3050
105.31	545.2504
129.07	535.6212
143.76	583.8518
198.00	480.4304
209.25	461.3540
228.18	428.7834
238.63	378.3801
242.00	379.0581
269.46	349.9179
270.25	337.5840
277.36	330.4248
295.22	275.0118
300.09	330.7612
312.17	249.4437
338.32	247.3785
351.93	217.9547
387.59	199.9191
409.46	172.0821
427.87	166.0896
463.00	141.1996
510.77	137.1641
583.19	112.2443
609.31	126.1613
661.66	92.9018
727.33	101.0896
763.13	60.4505
768.36	111.8723
785.37	83.5760
794.95	96.1464
806.17	94.4984
831.80	92.1934
860.56	79.2757
896.60	69.2016
911.20	75.2924
934.06	62.8932
964.77	61.3302
968.97	61.3844
1001.03	62.7924
1078.86	70.8659
1120.29	54.2327
1155.19	58.5516
1173.23	42.2562
1238.11	56.3115
1280.96	42.0264
1332.51	49.8151
1377.67	37.3755
1401.50	45.0249
1407.98	38.6338
1460.80	41.1234
1509.23	33.6458
1588.20	23.6450
1620.50	19.9556
1729.60	20.2676
1764.49	13.5767

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701024

Total Uranium Activity	5.8463E-02	ug/g
Total Uranium Counting Unc.	5.6600E-02	ug/g
Total Uranium Tpu	5.6600E-08	ug/g
Total Uranium Mda	5.0107E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:12:11.31

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701025.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 05:11:18
Sample ID        : G198701025           Sample quantity  : 1.22290E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.97  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.34*	8	388	1.37	92.14	88	8	5.46E-04	482.8	
2	3	62.97*	83	446	1.49	125.38	120	16	5.73E-03	53.5	2.60E+00
3	3	65.98*	85	422	1.50	131.39	120	16	5.89E-03	49.3	
4	3	74.69*	199	448	1.01	148.81	144	14	1.38E-02	19.2	4.30E+00
5	3	76.93*	395	415	1.00	153.28	144	14	2.75E-02	10.3	
6	0	85.64*	266	804	3.91	170.70	164	13	1.85E-02	23.5	
7	2	89.63	119	256	0.97	178.67	177	17	8.23E-03	20.7	4.51E-01
8	2	92.53*	232	471	1.32	184.46	177	17	1.61E-02	21.0	
9	0	143.36*	38	315	1.00	286.08	283	7	2.66E-03	87.8	
10	0	185.65*	112	482	1.35	370.62	365	11	7.75E-03	45.6	
11	0	205.06	78	289	1.26	409.44	405	8	5.43E-03	39.3	
12	0	209.24	152	392	1.13	417.78	413	11	1.06E-02	26.4	
13	2	238.37*	1213	315	1.52	476.02	470	19	8.42E-02	4.2	4.25E+00
14	2	241.54	249	385	1.82	482.37	470	19	1.73E-02	18.4	
15	0	270.35	151	362	1.38	539.97	534	13	1.05E-02	27.3	
16	0	276.63	91	280	1.01	552.51	547	11	6.34E-03	37.0	
17	0	294.93*	271	270	1.39	589.10	585	10	1.89E-02	13.6	
18	0	299.88	73	255	1.65	598.99	595	10	5.07E-03	42.6	
19	0	327.97	79	205	1.24	655.16	651	9	5.49E-03	34.5	
20	0	337.98*	275	205	1.67	675.18	671	10	1.91E-02	12.2	
21	0	351.62*	529	232	1.46	702.45	697	12	3.67E-02	7.6	
22	0	391.77	6	150	0.49	782.72	778	8	4.02E-04	373.3	
23	0	462.68	128	211	2.00	924.51	918	15	8.88E-03	26.2	
24	0	510.40*	29	257	2.41	1019.93	1012	17	2.04E-03	167.2	
25	0	582.63*	443	94	1.95	1164.36	1156	16	3.08E-02	7.5	
26	0	609.07*	371	158	1.71	1217.22	1211	11	2.58E-02	9.0	
27	0	649.43	57	151	8.64	1297.95	1288	20	3.99E-03	53.9	
28	0	661.16	466	120	1.62	1321.39	1314	12	3.23E-02	6.6	
29	0	726.67*	36	153	1.55	1452.41	1443	18	2.50E-03	98.1	
30	0	744.84	41	87	2.36	1488.74	1482	13	2.82E-03	50.7	
31	0	760.01	50	217	11.77	1519.09	1498	30	3.45E-03	87.6	
32	0	767.82	65	115	1.62	1534.71	1529	13	4.50E-03	36.5	
33	0	794.80	58	104	1.54	1588.67	1581	14	4.00E-03	40.0	
34	0	806.72	21	201	4.09	1612.50	1600	27	1.48E-03	186.4	
35	0	861.83	91	148	8.36	1722.73	1710	26	6.35E-03	38.1	
36	0	876.21	37	54	2.22	1751.48	1746	11	2.55E-03	42.4	
37	0	881.57	11	44	0.53	1762.21	1756	8	7.35E-04	114.5	
38	0	910.66*	292	51	2.14	1820.39	1814	15	2.03E-02	9.1	

Sample ID : G198701025 Acquisition date : 14-DEC-2007 05:11:18

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	1	964.23	105	63	2.53	1927.54	1915	36	7.29E-03	19.9	1.96E+00
40	1	968.73*	196	69	2.54	1936.54	1915	36	1.36E-02	13.0	
41	0	1052.82	44	56	4.86	2104.74	2097	16	3.06E-03	40.9	
42	0	1062.61	24	53	4.30	2124.31	2117	11	1.66E-03	56.4	
43	0	1077.94	28	38	4.62	2154.98	2147	14	1.92E-03	51.3	
44	0	1119.84*	123	52	3.54	2238.81	2229	19	8.54E-03	18.2	
45	0	1154.90	21	35	1.08	2308.94	2305	8	1.43E-03	55.0	
46	0	1236.69*	47	63	3.41	2472.55	2465	17	3.26E-03	44.2	
47	0	1302.00	34	38	5.32	2603.21	2596	15	2.37E-03	42.7	
48	0	1363.18	14	62	10.85	2725.61	2704	26	9.96E-04	155.7	
49	0	1372.49	14	21	1.01	2744.23	2739	9	9.57E-04	67.1	
50	0	1376.98	27	25	1.41	2753.23	2748	11	1.87E-03	40.7	
51	1	1396.36	21	13	2.63	2792.00	2789	16	1.49E-03	25.7	8.52E+00
52	1	1399.86	44	15	2.63	2799.00	2789	16	3.06E-03	22.3	
53	0	1408.19	12	37	4.65	2815.68	2804	14	8.25E-04	114.1	
54	0	1460.10*	493	40	2.58	2919.53	2909	20	3.42E-02	5.8	
55	0	1493.83	53	28	6.47	2987.02	2975	24	3.69E-03	30.4	
56	0	1501.66	15	17	0.92	3002.69	2998	12	1.05E-03	57.8	
57	0	1589.15	29	60	6.04	3177.75	3164	20	2.00E-03	68.6	
58	0	1620.27	62	38	4.05	3240.02	3225	30	4.31E-03	31.5	
59	0	1729.17	34	20	3.41	3457.95	3449	16	2.36E-03	34.0	
60	0	1764.00	95	36	2.13	3527.66	3519	20	6.58E-03	18.4	
61	0	1821.31	19	13	5.68	3642.34	3633	15	1.29E-03	50.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701025       *
* Acquisition date : 14-DEC-2007 05:11:18 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.97     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701025           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2229E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.555E+00	4.523E-01	2.277E-01	0.000E+00
CS-137	2.200E-01	3.430E-02	2.630E-02	0.000E+00
TL-208	1.907E-01	3.144E-02	2.223E-02	0.000E+00
BI-212	1.313E-01	2.529E-01	1.903E-01	0.000E+00
PB-212	5.907E-01	5.933E-02	4.104E-02	0.000E+00
BI-214	3.028E-01	5.839E-02	4.107E-02	0.000E+00
PB-214	3.681E-01	5.858E-02	4.958E-02	0.000E+00
RA-223	2.483E-01	1.337E-01	1.292E-01	0.000E+00
AC-228	5.906E-01	1.201E-01	8.660E-02	0.000E+00
TH-234	7.613E-01	3.192E-01	3.212E-01	0.000E+00
U-235	5.925E-02	1.020E-01	1.503E-01	0.000E+00
NP-237	4.039E-01	1.893E-01	1.477E-01	0.000E+00
AM-243	6.423E-02	2.461E-02	3.484E-02	0.000E+00
AM-246	6.000E-02	6.047E-02	8.361E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	8.047E-04		1.653E-02	2.749E-02	0.000E+00	NOT IDENT.
RH-101	8.506E-03		1.794E-02	2.788E-02	0.000E+00	NOT IDENT.
SB-125	-8.090E-04		3.991E-02	6.682E-02	0.000E+00	NOT IDENT.
EU-155	7.366E-03		4.375E-02	7.763E-02	0.000E+00	NOT IDENT.
PO-209	-2.033E+00		2.974E+00	4.807E+00	0.000E+00	NOT IDENT.
BI-211	8.352E-02		4.052E-01	7.037E-01	0.000E+00	NOT IDENT.
PA-233	-3.017E-03		2.591E-02	4.438E-02	0.000E+00	NOT IDENT.
PA-234M	1.524E+00		2.517E+00	3.306E+00	0.000E+00	NOT IDENT.
NP-236	1.588E-03		3.047E-02	4.408E-02	0.000E+00	NOT IDENT.
NP-239	-9.581E-02		1.124E-01	1.643E-01	0.000E+00	NOT IDENT.
AM-241	2.594E-02		5.741E-02	8.892E-02	0.000E+00	NOT IDENT.
CM-243	5.191E-03		3.956E-02	7.017E-02	0.000E+00	NOT IDENT.
CF-249	8.933E-03		1.916E-02	2.892E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:12:12.25

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701025.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 05:11:18
Sample ID        : G198701025           Sample quantity  : 1.22290E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.97  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	493	10.66*	1.997E+00	3.555E+00	3.555E+00	12.98
CS-137	661.66	466	85.10*	3.837E+00	2.189E-01	2.200E-01	15.91
TL-208	277.36	91	6.31	6.718E+00	3.308E-01	3.308E-01	74.23
	510.77	29	22.60	4.634E+00	4.296E-02	4.296E-02	334.44
	583.19	443	84.50*	4.220E+00	1.907E-01	1.907E-01	16.83
	763.13	------	1.81	3.420E+00	------	Line Not Found	------
	860.56	91	12.42	3.088E+00	3.658E-01	3.658E-01	76.78
BI-212	727.33	36	11.80*	3.560E+00	1.313E-01	1.313E-01	196.48
	785.37	------	1.10	3.340E+00	------	Line Not Found	------
	1620.50	62	1.49	1.873E+00	3.413E+00	3.413E+00	63.18
PB-212	74.81	199	10.40	6.965E+00	4.212E-01	4.212E-01	39.10
	77.11	395	17.50	7.258E+00	4.777E-01	4.777E-01	22.15
	87.30	266	7.81	8.165E+00	6.413E-01	6.413E-01	47.82
	238.63	1213	43.30*	7.279E+00	5.907E-01	5.907E-01	10.25
	300.09	73	3.28	6.424E+00	5.318E-01	5.318E-01	85.34
BI-214	609.31	371	46.10*	4.084E+00	3.028E-01	3.028E-01	19.68
	768.36	65	4.94	3.403E+00	5.918E-01	5.918E-01	73.63
	806.17	21	1.22	3.266E+00	8.237E-01	8.238E-01	372.95
	934.06	------	3.03	2.880E+00	------	Line Not Found	------
	1120.29	123	15.10	2.461E+00	5.077E-01	5.077E-01	37.20
	1155.19	21	1.63	2.397E+00	8.080E-01	8.081E-01	110.19
	1238.11	47	5.79	2.264E+00	5.493E-01	5.494E-01	88.71
	1280.96	------	1.43	2.201E+00	------	Line Not Found	------
	1377.67	27	4.00	2.082E+00	4.959E-01	4.959E-01	81.66
	1401.50	44	1.27	2.057E+00	2.587E+00	2.587E+00	44.89
	1407.98	12	2.15	2.048E+00	4.140E-01	4.141E-01	228.33
	1509.23	------	2.11	1.953E+00	------	Line Not Found	------
	1729.60	34	2.92	1.815E+00	9.860E-01	9.861E-01	68.22
	1764.49	95	15.40	1.801E+00	5.247E-01	5.248E-01	37.32
PB-214	74.81	199	6.44	6.965E+00	6.801E-01	6.802E-01	39.10
	77.11	395	10.80	7.258E+00	7.741E-01	7.742E-01	22.15
	87.30	266	4.84	8.165E+00	1.035E+00	1.035E+00	47.82

Sample ID : G198701025 Acquisition date : 14-DEC-2007 05:11:18

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	249	7.43	7.229E+00	7.129E-01	7.130E-01	37.24
	295.22	271	19.30	6.484E+00	3.329E-01	3.330E-01	27.78
	351.93	529	37.60*	5.862E+00	3.681E-01	3.681E-01	16.24
RA-223	269.46	151	13.70*	6.804E+00	2.483E-01	2.483E-01	54.95
AC-228	129.07	------	2.42	9.238E+00	------	Line Not Found	------
	209.25	152	3.89	7.781E+00	7.731E-01	7.731E-01	53.10
	270.25	151	3.46	6.804E+00	9.831E-01	9.831E-01	54.95
	338.32	275	11.27	5.999E+00	6.238E-01	6.238E-01	25.09
	409.46	------	1.92	5.348E+00	------	Line Not Found	------
	463.00	128	4.40	4.948E+00	9.015E-01	9.015E-01	52.87
	794.95	58	4.25	3.307E+00	6.284E-01	6.284E-01	80.54
	911.20	292	25.80*	2.945E+00	5.906E-01	5.906E-01	20.75
	964.77	105	4.99	2.802E+00	1.152E+00	1.152E+00	40.97
	968.97	196	15.80	2.791E+00	6.816E-01	6.816E-01	27.68
	1588.20	29	3.22	1.893E+00	7.236E-01	7.236E-01	137.37
TH-234	63.29	83	4.80	5.018E+00	5.258E-01	5.258E-01	107.24
	92.58	232	5.41*	8.650E+00	7.613E-01	7.613E-01	42.79
U-235	143.76	38	10.96*	9.051E+00	5.925E-02	5.925E-02	175.71
NP-237	86.48	266	12.40*	8.165E+00	4.039E-01	4.039E-01	47.82
AM-243	74.66	199	68.20*	6.965E+00	6.422E-02	6.423E-02	39.10
AM-246	1078.86	28	27.80*	2.543E+00	6.000E-02	6.000E-02	102.84

Flag: "*" = Keyline

Sample ID : G198701025 Acquisition date : 14-DEC-2007 05:11:18

Total number of lines in spectrum 61
Number of unidentified lines 21
Number of lines tentatively identified by NID 40 65.57%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.555E+00	3.555E+00	0.462E+00	12.98	
CS-137	9.47E+08S	1.00	2.189E-01	2.200E-01	0.350E-01	15.91	
TL-208	4.43E+17S	1.00	1.907E-01	1.907E-01	0.321E-01	16.83	
BI-212	4.43E+17S	1.00	1.313E-01	1.313E-01	2.580E-01	196.48	
PB-212	4.43E+17S	1.00	5.907E-01	5.907E-01	0.605E-01	10.25	
BI-214	5.05E+10S	1.00	3.028E-01	3.028E-01	0.596E-01	19.68	
PB-214	5.05E+10S	1.00	3.681E-01	3.681E-01	0.598E-01	16.24	
RA-223	1.04E+12S	1.00	2.483E-01	2.483E-01	1.364E-01	54.95	
AC-228	4.43E+17S	1.00	5.906E-01	5.906E-01	1.225E-01	20.75	
TH-234	1.41E+17S	1.00	7.613E-01	7.613E-01	3.257E-01	42.79	
U-235	2.22E+16S	1.00	5.925E-02	5.925E-02	10.41E-02	175.71	
NP-237	6.75E+13S	1.00	4.039E-01	4.039E-01	1.932E-01	47.82	
AM-243	2.33E+11S	1.00	6.422E-02	6.423E-02	2.511E-02	39.10	
AM-246	2.18E+11S	1.00	6.000E-02	6.000E-02	6.170E-02	102.84	
			---	---			
	Total Activity :		7.545E+00	7.546E+00			

Grand Total Activity : 7.545E+00 7.546E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701025 Acquisition date : 14-DEC-2007 05:11:18

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.34	8	388	1.37	92.14	88	8	5.46E-04	****	1.66E+00	
3	65.98	85	422	1.50	131.39	120	16	5.89E-03	98.6	5.58E+00	
2	89.63	119	256	0.97	178.67	177	17	8.23E-03	41.4	8.47E+00	
0	185.65	112	482	1.35	370.62	365	11	7.75E-03	91.3	8.23E+00	
0	205.06	78	289	1.26	409.44	405	8	5.43E-03	78.7	7.86E+00	
0	327.97	79	205	1.24	655.16	651	9	5.49E-03	69.1	6.10E+00	
0	391.77	6	150	0.49	782.72	778	8	4.02E-04	****	5.49E+00	
0	649.43	57	151	8.64	1297.95	1288	20	3.99E-03	****	3.89E+00	
0	744.84	41	87	2.36	1488.74	1482	13	2.82E-03	****	3.49E+00	
0	760.01	50	217	11.77	1519.09	1498	30	3.45E-03	****	3.43E+00	
0	876.21	37	54	2.22	1751.48	1746	11	2.55E-03	84.9	3.04E+00	
0	881.57	11	44	0.53	1762.21	1756	8	7.35E-04	****	3.03E+00	
0	1052.82	44	56	4.86	2104.74	2097	16	3.06E-03	81.8	2.60E+00	
0	1062.61	24	53	4.30	2124.31	2117	11	1.66E-03	****	2.57E+00	
0	1302.00	34	38	5.32	2603.21	2596	15	2.37E-03	85.3	2.17E+00	
0	1363.18	14	62	10.85	2725.61	2704	26	9.96E-04	****	2.10E+00	
0	1372.49	14	21	1.01	2744.23	2739	9	9.57E-04	****	2.09E+00	
1	1396.36	21	13	2.63	2792.00	2789	16	1.49E-03	51.5	2.06E+00	
0	1493.83	53	28	6.47	2987.02	2975	24	3.69E-03	60.8	1.97E+00	
0	1501.66	15	17	0.92	3002.69	2998	12	1.05E-03	****	1.96E+00	
0	1821.31	19	13	5.68	3642.34	3633	15	1.29E-03	****	1.78E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701025            *
* Acquisition date : 14-DEC-2007 05:11:18 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.97     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701025           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2229E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.555E+00	4.523E-01	1.139E-01	4.523E-01
CS-137	2.200E-01	3.430E-02	1.316E-02	3.430E-02
TL-208	1.907E-01	3.144E-02	1.112E-02	3.144E-02
BI-212	1.313E-01	2.529E-01	9.518E-02	2.529E-01
PB-212	5.907E-01	5.933E-02	2.053E-02	5.933E-02
BI-214	3.028E-01	5.839E-02	2.055E-02	5.839E-02
PB-214	3.681E-01	5.858E-02	2.481E-02	5.858E-02
RA-223	2.483E-01	1.337E-01	6.462E-02	1.337E-01
AC-228	5.906E-01	1.201E-01	4.332E-02	1.201E-01
TH-234	7.613E-01	3.192E-01	1.607E-01	3.192E-01
U-235	5.925E-02	1.020E-01	7.518E-02	1.020E-01
NP-237	4.039E-01	1.893E-01	7.388E-02	1.893E-01
AM-243	6.423E-02	2.461E-02	1.743E-02	2.461E-02
AM-246	6.000E-02	6.047E-02	4.183E-02	6.047E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	8.047E-04	1.653E-02	1.375E-02	1.653E-02	NOT IDENT.
RH-101	8.506E-03	1.794E-02	1.395E-02	1.794E-02	NOT IDENT.
SB-125	-8.090E-04	3.991E-02	3.343E-02	3.991E-02	NOT IDENT.
EU-155	7.366E-03	4.375E-02	3.884E-02	4.375E-02	NOT IDENT.
PO-209	-2.033E+00	2.974E+00	2.405E+00	2.974E+00	NOT IDENT.
BI-211	8.352E-02	4.052E-01	3.521E-01	4.052E-01	NOT IDENT.
PA-233	-3.017E-03	2.591E-02	2.220E-02	2.591E-02	NOT IDENT.
PA-234M	1.524E+00	2.517E+00	1.654E+00	2.517E+00	NOT IDENT.
NP-236	1.588E-03	3.047E-02	2.205E-02	3.047E-02	NOT IDENT.
NP-239	-9.581E-02	1.124E-01	8.222E-02	1.124E-01	NOT IDENT.
AM-241	2.594E-02	5.741E-02	4.449E-02	5.741E-02	NOT IDENT.
CM-243	5.191E-03	3.956E-02	3.511E-02	3.956E-02	NOT IDENT.
CF-249	8.933E-03	1.916E-02	1.447E-02	1.916E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	321.4028
63.29	352.8914
74.66	499.9119
74.81	500.1040
74.81	500.1040
77.11	503.0399
77.11	503.0399
86.48	416.8740
87.30	470.4091
87.30	470.4091
92.58	415.4730
98.44	379.8755
103.76	386.8778
105.31	384.3940
129.07	379.6536
143.76	411.9668
198.00	356.1442
209.25	346.3819
228.18	369.3485
238.63	314.2811
242.00	315.4484
269.46	274.4343
270.25	274.6539
277.36	259.4121
295.22	316.3668
300.09	242.7479
312.17	223.8010
338.32	227.9617
351.93	226.5435
387.59	190.7248
409.46	195.9368
427.87	184.7242
463.00	172.8717
510.77	160.6114
583.19	120.7128
609.31	115.0797
661.66	140.7782
727.33	123.4016
763.13	140.2634
768.36	140.5830
785.37	100.4174
794.95	100.8268
806.17	100.3583
831.80	100.3144
860.56	91.0446
896.60	106.7531
911.20	84.1356
934.06	77.0520
964.77	79.8897
968.97	80.0098
1001.03	76.9235
1078.86	68.1978
1120.29	74.8251
1155.19	80.8967
1173.23	77.1195
1238.11	82.0867
1280.96	51.5132
1332.51	56.1238
1377.67	78.3545
1401.50	0.0000
1407.98	63.1836
1460.80	46.2533
1509.23	39.6088
1588.20	55.0423
1620.50	49.9102
1729.60	22.1603
1764.49	36.2579

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701025

Total Uranium Activity	2.7416E-02	ug/g
Total Uranium Counting Unc.	4.7209E-02	ug/g
Total Uranium Tpu	4.7209E-08	ug/g
Total Uranium Mda	3.4784E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:13:49.99

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701026.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 05:12:48
Sample ID        : G198701026           Sample quantity  : 1.31040E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.23  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.83*	26	315	0.98	93.61	90	8	1.79E-03	131.0	
2	0	63.08*	58	268	1.18	126.11	123	7	4.06E-03	55.0	
3	2	74.95	221	304	0.98	149.85	145	14	1.54E-02	14.4	1.55E+00
4	2	77.14*	319	286	0.99	154.23	145	14	2.22E-02	11.0	
5	0	83.87*	68	441	1.15	167.70	163	9	4.75E-03	60.0	
6	0	87.21	114	391	1.05	174.38	172	7	7.90E-03	30.3	
7	2	90.02	65	152	0.89	179.99	178	12	4.53E-03	27.0	1.83E+00
8	2	92.70*	109	250	0.90	185.35	178	12	7.56E-03	29.6	
9	0	129.20	94	283	1.56	258.37	255	8	6.51E-03	32.9	
10	0	153.40	77	351	1.80	306.77	303	9	5.33E-03	45.4	
11	0	186.07*	128	419	1.22	372.12	368	11	8.90E-03	35.1	
12	0	209.34	115	246	1.03	418.68	415	8	8.00E-03	25.3	
13	0	216.34*	23	141	0.79	432.67	430	5	1.61E-03	89.0	
14	5	238.65*	769	220	0.98	477.29	473	15	5.34E-02	5.0	2.69E+00
15	5	241.68	188	262	1.56	483.36	473	15	1.30E-02	18.6	
16	0	270.14	91	202	1.61	540.30	536	9	6.29E-03	30.3	
17	0	295.13*	349	243	1.05	590.29	584	12	2.42E-02	11.2	
18	0	300.18	43	201	0.90	600.39	597	8	2.99E-03	58.9	
19	0	321.85	40	98	0.98	643.73	641	6	2.77E-03	42.3	
20	0	328.55	38	167	0.62	657.14	654	9	2.63E-03	63.6	
21	0	338.21	144	239	1.20	676.47	672	10	9.98E-03	21.7	
22	0	351.87*	416	214	1.09	703.78	699	11	2.89E-02	8.8	
23	0	394.79	26	111	1.51	789.65	787	7	1.77E-03	71.1	
24	0	434.32*	27	103	1.41	868.73	865	9	1.89E-03	78.7	
25	0	464.06	69	167	0.69	928.22	920	15	4.77E-03	42.9	
26	0	511.32*	131	225	2.55	1022.76	1014	21	9.06E-03	36.0	
27	0	583.13*	271	98	1.45	1166.42	1161	11	1.88E-02	10.3	
28	0	609.22*	340	133	1.24	1218.63	1212	13	2.36E-02	9.4	
29	0	616.04*	23	119	5.60	1232.28	1225	16	1.58E-03	118.8	
30	0	662.18*	79	112	1.73	1324.59	1318	13	5.49E-03	31.0	
31	0	669.50	28	48	1.47	1339.24	1335	8	1.92E-03	47.5	
32	0	694.55	19	83	2.35	1389.35	1382	11	1.28E-03	97.9	
33	0	727.88	61	98	1.57	1456.04	1447	13	4.27E-03	35.5	
34	0	796.49	28	125	4.48	1593.30	1585	16	1.91E-03	92.6	
35	0	856.47	18	22	1.69	1713.32	1709	7	1.26E-03	50.3	
36	1	859.98	54	14	1.90	1720.35	1716	48	3.73E-03	20.6	2.62E+00
37	1	876.30	22	19	1.74	1753.00	1716	48	1.56E-03	44.5	
38	1	880.13	22	12	1.92	1760.65	1716	48	1.53E-03	29.4	

Sample ID : G198701026 Acquisition date : 14-DEC-2007 05:12:48

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	910.94*	174	60	1.37	1822.30	1814	14	1.21E-02	12.8	
40	0	958.35	26	16	1.47	1917.17	1914	8	1.80E-03	34.1	
41	0	963.66	57	34	2.89	1927.78	1921	13	3.97E-03	25.2	
42	0	968.62	84	50	1.48	1937.71	1933	10	5.80E-03	19.3	
43	0	1119.84	96	36	1.46	2240.32	2234	14	6.67E-03	16.6	
44	0	1146.04	18	43	0.94	2292.74	2282	16	1.24E-03	86.6	
45	0	1159.65	19	7	1.37	2319.97	2316	8	1.29E-03	34.9	
46	1	1205.83	39	10	2.17	2412.39	2409	13	2.70E-03	16.5	6.42E+00
47	1	1208.44	28	5	2.17	2417.61	2409	13	1.93E-03	26.5	
48	0	1237.80*	30	35	1.22	2476.37	2470	11	2.10E-03	44.1	
49	0	1274.05	32	16	3.34	2548.91	2543	13	2.24E-03	31.2	
50	0	1280.85	40	5	1.39	2562.51	2557	12	2.76E-03	19.9	
51	0	1378.47	15	24	3.13	2757.87	2752	11	1.01E-03	71.0	
52	0	1385.06	26	13	0.77	2771.07	2763	14	1.79E-03	36.4	
53	0	1414.96	7	17	1.39	2830.90	2825	11	4.69E-04	123.4	
54	0	1460.22*	406	21	2.22	2921.47	2912	17	2.82E-02	5.8	
55	0	1666.03	10	20	4.08	3333.40	3321	20	6.94E-04	114.0	
56	0	1696.97	8	11	0.70	3395.31	3387	12	5.48E-04	93.9	
57	0	1763.57	75	3	3.72	3528.62	3519	16	5.19E-03	13.0	
58	0	1770.05*	2	21	0.76	3541.60	3536	12	1.33E-04	643.5	
59	0	1800.31	8	6	0.70	3602.16	3594	12	5.75E-04	68.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701026       *
* Acquisition date : 14-DEC-2007 05:12:48 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:08.23     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701026           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3104E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.253E+00	6.986E-01	3.046E-01	0.000E+00
CS-137	6.363E-02	3.879E-02	3.451E-02	0.000E+00
TL-208	1.959E-01	4.085E-02	3.462E-02	0.000E+00
BI-212	3.859E-01	2.695E-01	2.291E-01	0.000E+00
PB-212	5.338E-01	5.991E-02	5.134E-02	0.000E+00
BI-214	4.677E-01	9.010E-02	6.168E-02	0.000E+00
PB-214	4.487E-01	8.098E-02	6.653E-02	0.000E+00
RA-223	2.182E-01	1.302E-01	1.680E-01	0.000E+00
AC-228	6.123E-01	1.604E-01	1.181E-01	0.000E+00
TH-234	5.012E-01	2.929E-01	3.598E-01	0.000E+00
NP-237	2.448E-01	1.464E-01	1.762E-01	0.000E+00
AM-243	1.115E-01	3.236E-02	3.927E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-3.524E-03		2.083E-02	3.470E-02	0.000E+00	NOT IDENT.
RH-101	-3.169E-04		1.989E-02	3.026E-02	0.000E+00	NOT IDENT.
SB-125	-2.739E-03		5.051E-02	8.611E-02	0.000E+00	NOT IDENT.
EU-155	2.085E-02		4.622E-02	8.506E-02	0.000E+00	NOT IDENT.
PO-209	1.367E+00		4.508E+00	7.723E+00	0.000E+00	NOT IDENT.
BI-211	1.164E-02		5.768E-01	9.735E-01	0.000E+00	NOT IDENT.
PA-233	-7.691E-03		3.305E-02	5.761E-02	0.000E+00	NOT IDENT.
PA-234M	-1.689E+00		2.910E+00	4.206E+00	0.000E+00	NOT IDENT.
U-235	-4.232E-02		1.078E-01	1.581E-01	0.000E+00	NOT IDENT.
NP-236	1.372E-02		2.594E-02	4.811E-02	0.000E+00	NOT IDENT.
NP-239	1.084E-01		1.110E-01	1.967E-01	0.000E+00	NOT IDENT.
AM-241	9.519E-02		8.163E-02	1.377E-01	0.000E+00	NOT IDENT.
CM-243	-3.737E-02		4.160E-02	7.237E-02	0.000E+00	NOT IDENT.
AM-246	-4.445E-02		7.203E-02	1.157E-01	0.000E+00	NOT IDENT.
CF-249	3.639E-03		2.278E-02	3.969E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 09:13:51.01

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701026.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 05:12:48
Sample ID        : G198701026           Sample quantity  : 1.31040E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:08.23  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	406	10.66*	1.037E+00	5.253E+00	5.253E+00	13.57
CS-137	661.66	79	85.10*	2.100E+00	6.332E-02	6.363E-02	62.21
TL-208	277.36	------	6.31	4.253E+00	------	Line Not Found	------
	510.77	131	22.60	2.612E+00	3.167E-01	3.167E-01	72.17
	583.19	271	84.50*	2.341E+00	1.959E-01	1.959E-01	21.28
	763.13	------	1.81	1.854E+00	------	Line Not Found	------
	860.56	54	12.42	1.665E+00	3.724E-01	3.724E-01	41.88
BI-212	727.33	61	11.80*	1.934E+00	3.859E-01	3.859E-01	71.26
	785.37	------	1.10	1.807E+00	------	Line Not Found	------
	1620.50	------	1.49	9.597E-01	------	Line Not Found	------
PB-212	74.81	221	10.40	4.164E+00	7.313E-01	7.313E-01	29.61
	77.11	319	17.50	4.416E+00	5.917E-01	5.917E-01	23.21
	87.30	114	7.81	5.371E+00	3.886E-01	3.886E-01	61.02
	238.63	769	43.30*	4.767E+00	5.338E-01	5.338E-01	11.45
	300.09	43	3.28	4.000E+00	4.701E-01	4.701E-01	118.02
BI-214	609.31	340	46.10*	2.256E+00	4.677E-01	4.677E-01	19.66
	768.36	------	4.94	1.843E+00	------	Line Not Found	------
	806.17	------	1.22	1.765E+00	------	Line Not Found	------
	934.06	------	3.03	1.544E+00	------	Line Not Found	------
	1120.29	96	15.10	1.306E+00	6.975E-01	6.975E-01	33.80
	1155.19	------	1.63	1.270E+00	------	Line Not Found	------
	1238.11	30	5.79	1.194E+00	6.274E-01	6.275E-01	88.35
	1280.96	40	1.43	1.158E+00	3.442E+00	3.442E+00	40.45
	1377.67	15	4.00	1.087E+00	4.800E-01	4.800E-01	142.15
	1401.50	------	1.27	1.073E+00	------	Line Not Found	------
	1407.98	------	2.15	1.069E+00	------	Line Not Found	------
	1509.23	------	2.11	1.011E+00	------	Line Not Found	------
	1729.60	------	2.92	9.196E-01	------	Line Not Found	------
	1764.49	75	15.40	9.090E-01	7.653E-01	7.654E-01	26.66
PB-214	74.81	221	6.44	4.164E+00	1.181E+00	1.181E+00	29.61
	77.11	319	10.80	4.416E+00	9.587E-01	9.588E-01	23.21
	87.30	114	4.84	5.371E+00	6.271E-01	6.272E-01	61.02

Sample ID : G198701026 Acquisition date : 14-DEC-2007 05:12:48

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	188	7.43	4.722E+00	7.657E-01	7.657E-01	37.71
	295.22	349	19.30	4.053E+00	6.390E-01	6.391E-01	23.08
	351.93	416	37.60*	3.530E+00	4.486E-01	4.487E-01	18.42
RA-223	269.46	91	13.70*	4.341E+00	2.182E-01	2.182E-01	60.90
AC-228	129.07	94	2.42	6.529E+00	8.494E-01	8.494E-01	66.12
	209.25	115	3.89	5.235E+00	8.104E-01	8.104E-01	50.98
	270.25	91	3.46	4.341E+00	8.640E-01	8.640E-01	60.90
	338.32	144	11.27	3.642E+00	5.015E-01	5.015E-01	43.85
	409.46	------	1.92	3.128E+00	------ Line Not Found		------
	463.00	69	4.40	2.828E+00	7.915E-01	7.915E-01	85.90
	794.95	28	4.25	1.785E+00	5.193E-01	5.193E-01	185.27
	911.20	174	25.80*	1.580E+00	6.123E-01	6.123E-01	26.73
	964.77	57	4.99	1.500E+00	1.095E+00	1.095E+00	50.91
	968.97	84	15.80	1.493E+00	5.075E-01	5.075E-01	39.26
	1588.20	------	3.22	9.734E-01	------ Line Not Found		------
TH-234	63.29	58	4.80	2.597E+00	6.716E-01	6.716E-01	110.23
	92.58	109	5.41*	5.751E+00	5.012E-01	5.012E-01	59.63
NP-237	86.48	114	12.40*	5.371E+00	2.448E-01	2.448E-01	61.02
AM-243	74.66	221	68.20*	4.164E+00	1.115E-01	1.115E-01	29.61

Flag: "*" = Keyline

Sample ID : G198701026 Acquisition date : 14-DEC-2007 05:12:48

Total number of lines in spectrum 59
Number of unidentified lines 28
Number of lines tentatively identified by NID 31 52.54%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.253E+00	5.253E+00	0.713E+00	13.57	
CS-137	9.47E+08S	1.00	6.332E-02	6.363E-02	3.959E-02	62.21	
TL-208	4.43E+17S	1.00	1.959E-01	1.959E-01	0.417E-01	21.28	
BI-212	4.43E+17S	1.00	3.859E-01	3.859E-01	2.750E-01	71.26	
PB-212	4.43E+17S	1.00	5.338E-01	5.338E-01	0.611E-01	11.45	
BI-214	5.05E+10S	1.00	4.677E-01	4.677E-01	0.919E-01	19.66	
PB-214	5.05E+10S	1.00	4.486E-01	4.487E-01	0.826E-01	18.42	
RA-223	1.04E+12S	1.00	2.182E-01	2.182E-01	1.329E-01	60.90	
AC-228	4.43E+17S	1.00	6.123E-01	6.123E-01	1.637E-01	26.73	
TH-234	1.41E+17S	1.00	5.012E-01	5.012E-01	2.988E-01	59.63	
NP-237	6.75E+13S	1.00	2.448E-01	2.448E-01	1.494E-01	61.02	
AM-243	2.33E+11S	1.00	1.115E-01	1.115E-01	0.330E-01	29.61	
			---	---			
		Total Activity :	9.037E+00	9.037E+00			
		Grand Total Activity :	9.037E+00	9.037E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701026 Acquisition date : 14-DEC-2007 05:12:48

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.83	26	315	0.98	93.61	90	8	1.79E-03	****	6.10E-01	
0	83.87	68	441	1.15	167.70	163	9	4.75E-03	****	5.09E+00	
2	90.02	65	152	0.89	179.99	178	12	4.53E-03	54.0	5.58E+00	
0	153.40	77	351	1.80	306.77	303	9	5.33E-03	90.7	6.25E+00	
0	186.07	128	419	1.22	372.12	368	11	8.90E-03	70.2	5.65E+00	
0	216.34	23	141	0.79	432.67	430	5	1.61E-03	****	5.12E+00	
0	321.85	40	98	0.98	643.73	641	6	2.77E-03	84.5	3.79E+00	
0	328.55	38	167	0.62	657.14	654	9	2.63E-03	****	3.73E+00	
0	394.79	26	111	1.51	789.65	787	7	1.77E-03	****	3.22E+00	
0	434.32	27	103	1.41	868.73	865	9	1.89E-03	****	2.98E+00	
0	616.04	23	119	5.60	1232.28	1225	16	1.58E-03	****	2.23E+00	
0	669.50	28	48	1.47	1339.24	1335	8	1.92E-03	95.0	2.08E+00	
0	694.55	19	83	2.35	1389.35	1382	11	1.28E-03	****	2.02E+00	
0	856.47	18	22	1.69	1713.32	1709	7	1.26E-03	****	1.67E+00	
1	876.30	22	19	1.74	1753.00	1716	48	1.56E-03	89.0	1.64E+00	
1	880.13	22	12	1.92	1760.65	1716	48	1.53E-03	58.7	1.63E+00	
0	958.35	26	16	1.47	1917.17	1914	8	1.80E-03	68.2	1.51E+00	
0	1146.04	18	43	0.94	2292.74	2282	16	1.24E-03	****	1.28E+00	
0	1159.65	19	7	1.37	2319.97	2316	8	1.29E-03	69.8	1.27E+00	
1	1205.83	39	10	2.17	2412.39	2409	13	2.70E-03	33.1	1.22E+00	
1	1208.44	28	5	2.17	2417.61	2409	13	1.93E-03	52.9	1.22E+00	
0	1274.05	32	16	3.34	2548.91	2543	13	2.24E-03	62.3	1.16E+00	
0	1385.06	26	13	0.77	2771.07	2763	14	1.79E-03	72.8	1.08E+00	
0	1414.96	7	17	1.39	2830.90	2825	11	4.69E-04	****	1.06E+00	
0	1666.03	10	20	4.08	3333.40	3321	20	6.94E-04	****	9.42E-01	
0	1696.97	8	11	0.70	3395.31	3387	12	5.48E-04	****	9.31E-01	
0	1770.05	2	21	0.76	3541.60	3536	12	1.33E-04	****	9.07E-01	
0	1800.31	8	6	0.70	3602.16	3594	12	5.75E-04	****	8.98E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701026            *
* Acquisition date : 14-DEC-2007 05:12:48 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:08.23     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701026           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3104E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.253E+00	6.986E-01	1.524E-01	6.986E-01
CS-137	6.363E-02	3.879E-02	1.727E-02	3.879E-02
TL-208	1.959E-01	4.085E-02	1.732E-02	4.085E-02
BI-212	3.859E-01	2.695E-01	1.146E-01	2.695E-01
PB-212	5.338E-01	5.991E-02	2.569E-02	5.991E-02
BI-214	4.677E-01	9.010E-02	3.086E-02	9.010E-02
PB-214	4.487E-01	8.098E-02	3.329E-02	8.098E-02
RA-223	2.182E-01	1.302E-01	8.405E-02	1.302E-01
AC-228	6.123E-01	1.604E-01	5.910E-02	1.604E-01
TH-234	5.012E-01	2.929E-01	1.800E-01	2.929E-01
NP-237	2.448E-01	1.464E-01	8.817E-02	1.464E-01
AM-243	1.115E-01	3.236E-02	1.965E-02	3.236E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-3.524E-03	2.083E-02	1.736E-02	2.083E-02	NOT IDENT.
RH-101	-3.169E-04	1.989E-02	1.514E-02	1.989E-02	NOT IDENT.
SB-125	-2.739E-03	5.051E-02	4.308E-02	5.051E-02	NOT IDENT.
EU-155	2.085E-02	4.622E-02	4.255E-02	4.622E-02	NOT IDENT.
PO-209	1.367E+00	4.508E+00	3.864E+00	4.508E+00	NOT IDENT.
BI-211	1.164E-02	5.768E-01	4.870E-01	5.768E-01	NOT IDENT.
PA-233	-7.691E-03	3.305E-02	2.882E-02	3.305E-02	NOT IDENT.
PA-234M	-1.689E+00	2.910E+00	2.104E+00	2.910E+00	NOT IDENT.
U-235	-4.232E-02	1.078E-01	7.910E-02	1.078E-01	NOT IDENT.
NP-236	1.372E-02	2.594E-02	2.407E-02	2.594E-02	NOT IDENT.
NP-239	1.084E-01	1.110E-01	9.839E-02	1.110E-01	NOT IDENT.
AM-241	9.519E-02	8.163E-02	6.889E-02	8.163E-02	NOT IDENT.
CM-243	-3.737E-02	4.160E-02	3.621E-02	4.160E-02	NOT IDENT.
AM-246	-4.445E-02	7.203E-02	5.789E-02	7.203E-02	NOT IDENT.
CF-249	3.639E-03	2.278E-02	1.986E-02	2.278E-02	NOT IDENT.

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                 2040 SAVAGE ROAD                          *
*                              CHARLESTON ,SC 29417                         *
*                        GAMMA SPECTROSCOPY BACKGROUND REPORT               *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	168.7279
63.29	208.7868
74.66	249.7124
74.81	249.8319
74.81	249.8319
77.11	251.6487
77.11	251.6487
86.48	276.3713
87.30	312.2743
87.30	312.2743
92.58	256.8335
98.44	230.1456
103.76	258.7147
105.31	232.4193
129.07	251.8509
143.76	228.8107
198.00	262.5249
209.25	219.9395
228.18	189.6411
238.63	237.8460
242.00	238.8822
269.46	213.0128
270.25	194.1440
277.36	188.7594
295.22	174.0257
300.09	180.6820
312.17	167.0308
338.32	159.3732
351.93	167.1326
387.59	152.1390
409.46	144.0641
427.87	118.0051
463.00	109.8592
510.77	114.7675
583.19	102.3167
609.31	89.8564
661.66	82.6474
727.33	60.1160
763.13	96.2635
768.36	79.5938
785.37	57.1753
794.95	70.5349
806.17	63.8152
831.80	66.6187
860.56	32.8743
896.60	67.4797
911.20	51.2751
934.06	43.9078
964.77	21.6851
968.97	56.1131
1001.03	52.7859
1078.86	53.7692
1120.29	36.3749
1155.19	33.2143
1173.23	42.8846
1238.11	46.0748
1280.96	36.3208
1332.51	36.8921
1377.67	28.4833
1401.50	28.2305
1407.98	10.7746
1460.80	25.5127
1509.23	25.8486
1588.20	28.2704
1620.50	19.9512
1729.60	13.6567
1764.49	13.7686

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701026

Total Uranium Activity	-1.9582E-02	ug/g
Total Uranium Counting Unc.	4.9895E-02	ug/g
Total Uranium Tpu	4.9895E-08	ug/g
Total Uranium Mda	3.6600E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:38:35.78

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701027.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 06:38:04
Sample ID        : G198701027           Sample quantity  : 1.55930E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.83  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.29*	83	577	1.10	93.37	88	11	5.74E-03	67.0	
2	0	53.37	55	527	2.10	107.50	103	9	3.79E-03	76.9	
3	0	62.94*	169	487	1.30	126.65	123	7	1.17E-02	25.3	
4	3	74.63*	835	659	1.40	150.02	142	18	5.80E-02	6.7	3.08E+00
5	3	76.94*	1050	514	1.08	154.63	142	18	7.29E-02	5.1	
6	3	84.05*	153	538	1.56	168.83	165	28	1.06E-02	27.0	2.82E+00
7	3	87.04*	455	575	1.31	174.82	165	28	3.16E-02	10.5	
8	3	89.76	310	541	1.28	180.26	165	28	2.15E-02	14.6	
9	3	92.63*	457	500	1.26	185.99	165	28	3.18E-02	11.0	
10	0	105.50	78	587	1.28	211.72	207	9	5.39E-03	57.5	
11	0	129.26	79	484	1.09	259.20	255	8	5.49E-03	49.5	
12	0	172.61	97	661	3.07	345.84	339	14	6.70E-03	57.5	
13	0	185.76*	252	512	1.40	372.13	367	11	1.75E-02	20.0	
14	0	209.20	125	499	0.86	418.98	414	11	8.65E-03	35.9	
15	3	238.69*	1607	279	1.12	477.90	473	16	1.12E-01	3.2	6.16E-01
16	3	241.78	395	339	1.63	484.10	473	16	2.74E-02	11.7	
17	0	269.94	221	350	1.58	540.37	533	14	1.54E-02	19.1	
18	0	277.16	58	246	1.21	554.79	552	8	4.05E-03	48.3	
19	0	295.35*	535	335	1.28	591.15	585	12	3.72E-02	8.4	
20	0	300.19	135	220	1.20	600.81	597	9	9.38E-03	21.6	
21	0	327.80	62	259	0.89	656.01	652	9	4.31E-03	48.5	
22	0	338.45*	344	242	1.26	677.29	673	10	2.39E-02	10.3	
23	0	351.93*	846	225	1.41	704.21	698	14	5.87E-02	5.4	
24	0	356.87	42	171	0.88	714.10	711	11	2.94E-03	61.4	
25	0	410.07	37	190	1.04	820.40	814	9	2.56E-03	69.5	
26	0	462.68	121	191	1.40	925.52	918	14	8.41E-03	25.9	
27	0	469.27	23	111	1.33	938.70	935	8	1.60E-03	81.9	
28	0	510.75*	252	255	1.86	1021.57	1012	20	1.75E-02	19.3	
29	0	545.12	16	141	0.48	1090.25	1084	11	1.13E-03	142.5	
30	0	583.31	507	148	1.35	1166.55	1160	15	3.52E-02	6.9	
31	0	609.59*	606	178	1.37	1219.06	1212	15	4.21E-02	6.6	
32	0	617.48	14	85	0.99	1234.81	1229	8	1.01E-03	114.5	
33	0	649.12	20	83	0.70	1298.04	1291	10	1.37E-03	89.3	
34	4	662.07	55	80	1.88	1323.90	1320	13	3.84E-03	29.6	6.30E-01
35	4	665.17	15	60	1.26	1330.10	1320	13	1.06E-03	85.7	
36	0	695.24	11	119	3.72	1390.17	1380	12	7.41E-04	209.4	
37	0	727.68	91	96	1.19	1454.99	1450	10	6.31E-03	22.9	
38	0	767.77	87	122	2.13	1535.07	1530	14	6.03E-03	28.8	

Sample ID : G198701027 Acquisition date : 14-DEC-2007 06:38:04

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	786.59	39	69	1.58	1572.66	1568	10	2.72E-03	43.4	
40	0	795.25	46	90	1.31	1589.97	1585	10	3.16E-03	41.7	
41	0	806.85	22	87	1.75	1613.13	1607	11	1.54E-03	84.5	
42	1	835.52	37	36	2.25	1670.41	1666	33	2.54E-03	35.0	1.35E+00
43	1	839.53	43	52	2.25	1678.41	1666	33	2.98E-03	39.3	
44	0	861.42	69	67	1.24	1722.14	1715	13	4.83E-03	27.6	
45	0	894.42	27	103	6.28	1788.06	1773	18	1.86E-03	92.6	
46	0	911.63*	339	70	1.83	1822.44	1816	14	2.35E-02	7.8	
47	0	950.33	39	67	5.31	1899.73	1892	14	2.74E-03	46.7	
48	1	965.27	84	46	2.34	1929.57	1920	29	5.80E-03	22.0	2.40E+00
49	1	969.53	166	48	2.11	1938.07	1920	29	1.16E-02	11.7	
50	0	1056.25*	6	103	4.56	2111.27	2098	17	4.49E-04	369.5	
51	0	1082.76	56	140	11.58	2164.22	2148	33	3.91E-03	65.3	
52	0	1096.70	34	68	5.82	2192.06	2183	16	2.35E-03	57.2	
53	0	1120.76*	156	48	2.01	2240.10	2233	16	1.09E-02	13.2	
54	0	1133.59	45	86	7.56	2265.74	2249	25	3.10E-03	58.4	
55	0	1238.27	85	39	2.06	2474.77	2468	14	5.93E-03	18.8	
56	0	1255.63	28	23	1.87	2509.44	2505	10	1.96E-03	36.7	
57	0	1378.59	37	30	1.68	2754.96	2749	13	2.56E-03	35.7	
58	0	1403.07	28	22	1.63	2803.82	2799	11	1.94E-03	37.5	
59	0	1461.56*	614	42	2.14	2920.60	2910	21	4.26E-02	4.9	
60	3	1588.70	26	20	3.30	3174.43	3167	38	1.80E-03	45.1	2.51E+00
61	3	1592.50	42	14	2.48	3182.00	3167	38	2.94E-03	26.0	
62	3	1599.40*	17	12	3.01	3195.78	3167	38	1.21E-03	66.7	
63	3	1602.84	16	2	3.31	3202.64	3167	38	1.14E-03	22.0	
64	0	1631.70	30	5	1.58	3260.26	3255	12	2.09E-03	24.2	
65	0	1641.25	17	3	4.13	3279.33	3273	12	1.19E-03	31.4	
66	0	1688.07	15	6	1.90	3372.79	3369	8	1.03E-03	38.9	
67	0	1730.78	28	19	0.71	3458.03	3450	15	1.98E-03	38.0	
68	0	1765.40*	125	21	2.46	3527.14	3515	21	8.67E-03	13.6	
69	0	1838.56	21	3	3.45	3673.15	3667	13	1.43E-03	28.6	
70	0	1873.58	25	7	4.38	3743.04	3736	14	1.74E-03	30.1	
71	0	1939.48	11	4	0.86	3874.56	3869	13	7.87E-04	44.6	
72	0	1945.42	6	4	1.27	3886.42	3881	8	4.17E-04	70.7	
73	0	1973.36	13	5	1.01	3942.16	3936	11	8.91E-04	44.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701027       *
* Acquisition date : 14-DEC-2007 06:38:04 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.83     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701027           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5593E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	7.099E+00	8.766E-01	3.398E-01	0.000E+00
CS-137	4.170E-02	2.439E-02	4.213E-02	0.000E+00
EU-155	6.591E-02	7.449E-02	9.632E-02	0.000E+00
TL-208	3.427E-01	5.213E-02	3.806E-02	0.000E+00
BI-212	5.326E-01	2.427E-01	2.992E-01	0.000E+00
PB-212	1.000E+00	1.033E-01	5.856E-02	0.000E+00
BI-214	7.801E-01	1.155E-01	7.998E-02	0.000E+00
PB-214	8.271E-01	9.841E-02	7.167E-02	0.000E+00
RA-223	4.784E-01	1.824E-01	1.798E-01	0.000E+00
AC-228	1.100E+00	1.946E-01	1.370E-01	0.000E+00
TH-234	1.432E+00	3.323E-01	3.839E-01	0.000E+00
NP-237	6.144E-01	1.365E-01	1.648E-01	0.000E+00
AM-243	2.009E-01	3.083E-02	3.049E-02	0.000E+00
CM-243	5.929E-02	6.701E-02	8.335E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	7.617E-03		2.621E-02	4.598E-02	0.000E+00	NOT IDENT.
RH-101	1.604E-02		2.310E-02	3.834E-02	0.000E+00	NOT IDENT.
SB-125	-7.845E-03		5.744E-02	9.912E-02	0.000E+00	NOT IDENT.
PO-209	3.817E+00		4.838E+00	7.678E+00	0.000E+00	NOT IDENT.
BI-211	-3.321E-01		7.217E-01	1.003E+00	0.000E+00	NOT IDENT.
PA-233	4.647E-02		3.704E-02	6.938E-02	0.000E+00	NOT IDENT.
PA-234M	2.195E+00		2.590E+00	4.646E+00	0.000E+00	NOT IDENT.
U-235	-9.926E-02		1.232E-01	2.045E-01	0.000E+00	NOT IDENT.
NP-236	0.000E+00		3.189E-02	5.482E-02	0.000E+00	NOT IDENT.
NP-239	-4.944E-02		1.368E-01	2.331E-01	0.000E+00	NOT IDENT.
AM-241	2.199E-02		3.060E-02	5.244E-02	0.000E+00	NOT IDENT.
AM-246	4.346E-02		9.698E-02	1.556E-01	0.000E+00	NOT IDENT.
CF-249	-1.930E-03		2.504E-02	4.374E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:38:36.79

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701027.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 06:38:04
Sample ID        : G198701027           Sample quantity  : 1.55930E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.83  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	614	10.66*	9.764E-01	7.099E+00	7.099E+00	12.60
CS-137	661.66	55	85.10*	1.887E+00	4.150E-02	4.170E-02	59.67
EU-155	105.31	78	21.20*	6.880E+00	6.399E-02	6.591E-02	115.33
TL-208	277.36	58	6.31	3.984E+00	2.790E-01	2.790E-01	96.83
	510.77	252	22.60	2.368E+00	5.664E-01	5.664E-01	39.04
	583.19	507	84.50*	2.107E+00	3.427E-01	3.427E-01	15.52
	763.13	------	1.81	1.670E+00	------	Line Not Found	------
	860.56	69	12.42	1.507E+00	4.469E-01	4.469E-01	56.00
BI-212	727.33	91	11.80*	1.739E+00	5.326E-01	5.326E-01	46.51
	785.37	39	1.10	1.627E+00	2.634E+00	2.634E+00	87.31
	1620.50	------	1.49	8.967E-01	------	Line Not Found	------
PB-212	74.81	835	10.40	7.333E+00	1.317E+00	1.317E+00	15.66
	77.11	1050	17.50	7.312E+00	9.878E-01	9.878E-01	13.05
	87.30	455	7.81	7.191E+00	9.755E-01	9.755E-01	22.67
	238.63	1607	43.30*	4.466E+00	1.000E+00	1.000E+00	10.54
	300.09	135	3.28	3.737E+00	1.327E+00	1.327E+00	43.64
BI-214	609.31	606	46.10*	2.028E+00	7.800E-01	7.801E-01	15.11
	768.36	87	4.94	1.661E+00	1.274E+00	1.274E+00	58.25
	806.17	22	1.22	1.592E+00	1.373E+00	1.373E+00	169.29
	934.06	------	3.03	1.408E+00	------	Line Not Found	------
	1120.29	156	15.10	1.212E+00	1.028E+00	1.028E+00	27.20
	1155.19	------	1.63	1.183E+00	------	Line Not Found	------
	1238.11	85	5.79	1.118E+00	1.588E+00	1.589E+00	38.25
	1280.96	------	1.43	1.087E+00	------	Line Not Found	------
	1377.67	37	4.00	1.024E+00	1.083E+00	1.083E+00	71.80
	1401.50	28	1.27	1.010E+00	2.629E+00	2.629E+00	75.53
	1407.98	------	2.15	1.007E+00	------	Line Not Found	------
	1509.23	------	2.11	9.511E-01	------	Line Not Found	------
	1729.60	28	2.92	8.484E-01	1.384E+00	1.384E+00	76.34
	1764.49	125	15.40	8.343E-01	1.170E+00	1.170E+00	27.89
PB-214	74.81	835	6.44	7.333E+00	2.127E+00	2.128E+00	15.66
	77.11	1050	10.80	7.312E+00	1.601E+00	1.601E+00	13.05

Sample ID : G198701027 Acquisition date : 14-DEC-2007 06:38:04

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	455	4.84	7.191E+00	1.574E+00	1.574E+00	22.67
	242.00	395	7.43	4.423E+00	1.446E+00	1.446E+00	24.86
	295.22	535	19.30	3.786E+00	8.813E-01	8.814E-01	17.99
	351.93	846	37.60*	3.274E+00	8.270E-01	8.271E-01	12.14
RA-223	269.46	221	13.70*	4.067E+00	4.784E-01	4.784E-01	38.90
AC-228	129.07	79	2.42	6.405E+00	6.135E-01	6.135E-01	99.58
	209.25	125	3.89	4.904E+00	7.861E-01	7.861E-01	72.43
	270.25	221	3.46	4.067E+00	1.894E+00	1.894E+00	38.90
	338.32	344	11.27	3.384E+00	1.086E+00	1.086E+00	21.48
	409.46	37	1.92	2.871E+00	8.056E-01	8.056E-01	139.09
	463.00	121	4.40	2.583E+00	1.283E+00	1.283E+00	52.14
	794.95	46	4.25	1.612E+00	8.004E-01	8.004E-01	83.88
	911.20	339	25.80*	1.437E+00	1.100E+00	1.100E+00	18.06
	964.77	84	4.99	1.370E+00	1.470E+00	1.470E+00	44.84
	968.97	166	15.80	1.365E+00	9.282E-01	9.282E-01	24.90
	1588.20	26	3.22	9.116E-01	1.060E+00	1.060E+00	90.52
TH-234	63.29	169	4.80	7.386E+00	5.730E-01	5.730E-01	51.13
	92.58	457	5.41*	7.106E+00	1.432E+00	1.432E+00	23.68
NP-237	86.48	455	12.40*	7.191E+00	6.144E-01	6.144E-01	22.67
AM-243	74.66	835	68.20*	7.333E+00	2.009E-01	2.009E-01	15.66
CM-243	103.76	78	23.00*	6.880E+00	5.898E-02	5.929E-02	115.33

Flag: "*" = Keyline

Sample ID : G198701027 Acquisition date : 14-DEC-2007 06:38:04

Total number of lines in spectrum 73
Number of unidentified lines 34
Number of lines tentatively identified by NID 39 53.42%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	7.099E+00	7.099E+00	0.894E+00	12.60	
CS-137	9.47E+08S	1.00	4.150E-02	4.170E-02	2.489E-02	59.67	
EU-155	1.57E+08S	1.03	6.399E-02	6.591E-02	7.601E-02	115.33	
TL-208	4.43E+17S	1.00	3.427E-01	3.427E-01	0.532E-01	15.52	
BI-212	4.43E+17S	1.00	5.326E-01	5.326E-01	2.477E-01	46.51	
PB-212	4.43E+17S	1.00	1.000E+00	1.000E+00	0.105E+00	10.54	
BI-214	5.05E+10S	1.00	7.800E-01	7.801E-01	1.179E-01	15.11	
PB-214	5.05E+10S	1.00	8.270E-01	8.271E-01	1.004E-01	12.14	
RA-223	1.04E+12S	1.00	4.784E-01	4.784E-01	1.861E-01	38.90	
AC-228	4.43E+17S	1.00	1.100E+00	1.100E+00	0.199E+00	18.06	
TH-234	1.41E+17S	1.00	1.432E+00	1.432E+00	0.339E+00	23.68	
NP-237	6.75E+13S	1.00	6.144E-01	6.144E-01	1.393E-01	22.67	
AM-243	2.33E+11S	1.00	2.009E-01	2.009E-01	0.315E-01	15.66	
CM-243	8.99E+08S	1.01	5.898E-02	5.929E-02	6.838E-02	115.33	
			---	---			
	Total Activity :		1.457E+01	1.457E+01			

Grand Total Activity : 1.457E+01 1.457E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701027 Acquisition date : 14-DEC-2007 06:38:04

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.29	83	577	1.10	93.37	88	11	5.74E-03	****	7.29E+00	
0	53.37	55	527	2.10	107.50	103	9	3.79E-03	****	7.35E+00	
3	84.05	153	538	1.56	168.83	165	28	1.06E-02	54.0	7.23E+00	
3	89.76	310	541	1.28	180.26	165	28	2.15E-02	29.2	7.15E+00	
0	172.61	97	661	3.07	345.84	339	14	6.70E-03	****	5.54E+00	
0	185.76	252	512	1.40	372.13	367	11	1.75E-02	40.1	5.30E+00	
0	327.80	62	259	0.89	656.01	652	9	4.31E-03	96.9	3.48E+00	
0	356.87	42	171	0.88	714.10	711	11	2.94E-03	****	3.24E+00	
0	469.27	23	111	1.33	938.70	935	8	1.60E-03	****	2.55E+00	
0	545.12	16	141	0.48	1090.25	1084	11	1.13E-03	****	2.24E+00	
0	617.48	14	85	0.99	1234.81	1229	8	1.01E-03	****	2.00E+00	
0	649.12	20	83	0.70	1298.04	1291	10	1.37E-03	****	1.92E+00	
4	665.17	15	60	1.26	1330.10	1320	13	1.06E-03	****	1.88E+00	
0	695.24	11	119	3.72	1390.17	1380	12	7.41E-04	****	1.81E+00	
1	835.52	37	36	2.25	1670.41	1666	33	2.54E-03	69.9	1.55E+00	
1	839.53	43	52	2.25	1678.41	1666	33	2.98E-03	78.6	1.54E+00	
0	894.42	27	103	6.28	1788.06	1773	18	1.86E-03	****	1.46E+00	
0	950.33	39	67	5.31	1899.73	1892	14	2.74E-03	93.4	1.39E+00	
0	1056.25	6	103	4.56	2111.27	2098	17	4.49E-04	****	1.27E+00	
0	1082.76	56	140	11.58	2164.22	2148	33	3.91E-03	****	1.25E+00	
0	1096.70	34	68	5.82	2192.06	2183	16	2.35E-03	****	1.23E+00	
0	1133.59	45	86	7.56	2265.74	2249	25	3.10E-03	****	1.20E+00	
0	1255.63	28	23	1.87	2509.44	2505	10	1.96E-03	73.4	1.11E+00	
3	1592.50	42	14	2.48	3182.00	3167	38	2.94E-03	51.9	9.10E-01	
3	1599.40	17	12	3.01	3195.78	3167	38	1.21E-03	****	9.07E-01	
3	1602.84	16	2	3.31	3202.64	3167	38	1.14E-03	44.0	9.05E-01	
0	1631.70	30	5	1.58	3260.26	3255	12	2.09E-03	48.3	8.92E-01	
0	1641.25	17	3	4.13	3279.33	3273	12	1.19E-03	62.9	8.87E-01	
0	1688.07	15	6	1.90	3372.79	3369	8	1.03E-03	77.8	8.67E-01	
0	1838.56	21	3	3.45	3673.15	3667	13	1.43E-03	57.1	8.06E-01	
0	1873.58	25	7	4.38	3743.04	3736	14	1.74E-03	60.1	7.93E-01	
0	1939.48	11	4	0.86	3874.56	3869	13	7.87E-04	89.2	7.69E-01	
0	1945.42	6	4	1.27	3886.42	3881	8	4.17E-04	****	7.67E-01	
0	1973.36	13	5	1.01	3942.16	3936	11	8.91E-04	89.7	7.57E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701027            *
* Acquisition date : 14-DEC-2007 06:38:04 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.83     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701027           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5593E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	7.099E+00	8.766E-01	1.700E-01	8.766E-01
CS-137	4.170E-02	2.439E-02	2.108E-02	2.439E-02
EU-155	6.591E-02	7.449E-02	4.819E-02	7.449E-02
TL-208	3.427E-01	5.213E-02	1.904E-02	5.213E-02
BI-212	5.326E-01	2.427E-01	1.497E-01	2.427E-01
PB-212	1.000E+00	1.033E-01	2.930E-02	1.033E-01
BI-214	7.801E-01	1.155E-01	4.001E-02	1.155E-01
PB-214	8.271E-01	9.841E-02	3.586E-02	9.841E-02
RA-223	4.784E-01	1.824E-01	8.995E-02	1.824E-01
AC-228	1.100E+00	1.946E-01	6.854E-02	1.946E-01
TH-234	1.432E+00	3.323E-01	1.921E-01	3.323E-01
NP-237	6.144E-01	1.365E-01	8.246E-02	1.365E-01
AM-243	2.009E-01	3.083E-02	1.525E-02	3.083E-02
CM-243	5.929E-02	6.701E-02	4.170E-02	6.701E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	7.617E-03	2.621E-02	2.300E-02	2.621E-02	NOT IDENT.
RH-101	1.604E-02	2.310E-02	1.918E-02	2.310E-02	NOT IDENT.
SB-125	-7.845E-03	5.744E-02	4.959E-02	5.744E-02	NOT IDENT.
PO-209	3.817E+00	4.838E+00	3.841E+00	4.838E+00	NOT IDENT.
BI-211	-3.321E-01	7.217E-01	5.018E-01	7.217E-01	NOT IDENT.
PA-233	4.647E-02	3.704E-02	3.471E-02	3.704E-02	NOT IDENT.
PA-234M	2.195E+00	2.590E+00	2.324E+00	2.590E+00	NOT IDENT.
U-235	-9.926E-02	1.232E-01	1.023E-01	1.232E-01	NOT IDENT.
NP-236	6.418E-02	3.189E-02	2.743E-02	3.189E-02	NOT IDENT.
NP-239	-4.944E-02	1.368E-01	1.166E-01	1.368E-01	NOT IDENT.
AM-241	2.199E-02	3.060E-02	2.623E-02	3.060E-02	NOT IDENT.
AM-246	4.346E-02	9.698E-02	7.784E-02	9.698E-02	NOT IDENT.
CF-249	-1.930E-03	2.504E-02	2.188E-02	2.504E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	463.7950
63.29	590.5136
74.66	623.4880
74.81	623.6629
74.81	623.6629
77.11	626.3214
77.11	626.3214
86.48	584.7966
87.30	585.6113
87.30	585.6113
92.58	590.7589
98.44	437.7403
103.76	473.9656
105.31	508.1706
129.07	532.3539
143.76	551.5247
198.00	439.2797
209.25	373.6960
228.18	400.3300
238.63	364.7170
242.00	338.0029
269.46	287.9521
270.25	288.1325
277.36	284.6568
295.22	283.2678
300.09	257.4300
312.17	216.9773
338.32	243.2953
351.93	225.8475
387.59	223.9174
409.46	209.5457
427.87	180.9221
463.00	157.1796
510.77	152.4723
583.19	136.9945
609.31	167.1295
661.66	136.1661
727.33	113.8901
763.13	78.4529
768.36	96.6862
785.37	92.8351
794.95	96.5996
806.17	87.8868
831.80	94.3399
860.56	74.0845
896.60	62.4646
911.20	78.8906
934.06	77.9520
964.77	75.4967
968.97	75.5921
1001.03	62.3413
1078.86	77.6540
1120.29	73.3477
1155.19	72.1043
1173.23	77.2740
1238.11	64.8030
1280.96	54.5703
1332.51	45.1962
1377.67	40.8466
1401.50	37.4960
1407.98	41.1260
1460.80	39.2803
1509.23	36.5540
1588.20	26.0073
1620.50	32.0529
1729.60	28.8554
1764.49	20.1816

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701027

Total Uranium Activity	-4.5926E-02	ug/g
Total Uranium Counting Unc.	5.6983E-02	ug/g
Total Uranium Tpu	5.6983E-08	ug/g
Total Uranium Mda	4.7345E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:42:46.13

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701028.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 06:41:54
Sample ID        : G198701028           Sample quantity  : 1.23230E+02 GRAM
Detector name    : GAM07                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:27.11  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.43*	36	440	1.03	92.37	88	9	2.48E-03	117.8	
2	2	63.43*	81	488	1.17	126.36	120	11	5.61E-03	50.7	1.36E+00
3	6	72.51	84	313	1.74	144.52	142	17	5.84E-03	31.2	2.20E+00
4	6	74.98*	466	487	0.96	149.45	142	17	3.24E-02	9.3	
5	6	77.22*	792	506	1.08	153.93	142	17	5.50E-02	5.9	
6	2	84.47*	97	523	1.22	168.42	164	28	6.77E-03	40.6	1.40E+00
7	2	87.40	354	423	1.04	174.29	164	28	2.46E-02	10.6	
8	2	90.05	223	398	1.06	179.59	164	28	1.55E-02	15.9	
9	2	92.90*	318	427	1.22	185.28	164	28	2.21E-02	14.0	
10	0	115.44	111	406	1.97	230.35	226	9	7.68E-03	34.5	
11	0	129.52*	86	372	0.68	258.50	255	7	5.98E-03	40.2	
12	0	144.29*	5	246	1.01	288.03	286	5	3.22E-04	575.4	
13	0	154.14	130	527	1.19	307.74	302	12	9.01E-03	36.4	
14	0	186.11*	255	371	1.07	371.66	367	9	1.77E-02	16.2	
15	0	209.57	196	339	0.94	418.55	414	10	1.36E-02	19.1	
16	4	238.86*	1591	212	1.16	477.12	469	21	1.11E-01	3.1	1.72E+00
17	4	241.83	396	264	1.70	483.07	469	21	2.75E-02	11.3	
18	0	271.06	137	304	1.65	541.50	537	12	9.54E-03	27.0	
19	0	278.26	78	270	1.24	555.91	550	11	5.44E-03	42.3	
20	0	295.45*	474	194	1.31	590.28	586	10	3.29E-02	7.6	
21	0	300.38	104	184	1.72	600.13	596	9	7.23E-03	25.4	
22	0	328.48*	117	211	1.28	656.31	651	11	8.09E-03	26.9	
23	0	338.58*	315	191	1.37	676.50	672	10	2.19E-02	10.4	
24	0	352.16*	727	182	1.28	703.66	699	11	5.05E-02	5.5	
25	0	409.89	75	91	1.45	819.09	816	7	5.24E-03	23.9	
26	0	463.05	126	118	1.25	925.39	920	12	8.73E-03	19.4	
27	0	511.14*	108	234	1.77	1021.55	1013	18	7.52E-03	41.5	
28	0	562.10	24	104	1.35	1123.45	1120	10	1.66E-03	82.5	
29	0	583.36*	445	125	1.54	1165.94	1158	13	3.09E-02	7.5	
30	0	609.71*	570	115	1.43	1218.64	1212	14	3.96E-02	6.1	
31	0	630.22*	14	83	0.60	1259.65	1253	11	9.61E-04	136.5	
32	0	636.79	82	114	4.04	1272.78	1264	20	5.66E-03	34.0	
33	0	662.01*	32	69	2.04	1323.22	1318	9	2.19E-03	55.8	
34	0	727.62	122	94	2.45	1454.40	1448	13	8.44E-03	18.8	
35	1	768.34*	79	68	1.83	1535.83	1530	26	5.46E-03	24.5	2.57E+00
36	1	772.26	50	64	1.84	1543.67	1530	26	3.46E-03	33.6	
37	0	786.72	38	69	1.86	1572.59	1566	11	2.64E-03	45.8	
38	0	795.96	116	60	2.18	1591.04	1582	19	8.02E-03	18.8	

Sample ID : G198701028 Acquisition date : 14-DEC-2007 06:41:54

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	861.05*	31	76	1.84	1721.20	1713	15	2.17E-03	68.5	
40	0	911.52*	343	52	1.83	1822.12	1815	14	2.38E-02	7.4	
41	0	936.14	25	62	1.52	1871.35	1862	12	1.70E-03	67.7	
42	2	965.11*	45	60	1.94	1929.29	1924	20	3.13E-03	35.9	1.57E+00
43	2	969.31	217	47	1.73	1937.68	1924	20	1.51E-02	9.0	
44	0	1016.81	16	45	2.48	2032.67	2024	13	1.11E-03	92.9	
45	0	1052.72	52	55	4.51	2104.48	2093	22	3.64E-03	38.6	
46	0	1120.83*	117	45	1.50	2240.67	2235	12	8.13E-03	15.3	
47	0	1151.85	18	35	2.85	2302.70	2295	12	1.22E-03	72.3	
48	0	1225.30	34	53	7.45	2449.59	2439	19	2.39E-03	53.1	
49	0	1238.60	65	44	2.24	2476.18	2471	13	4.49E-03	24.8	
50	0	1377.88*	35	20	1.72	2754.70	2749	13	2.41E-03	33.9	
51	0	1400.92	7	41	0.91	2800.77	2790	15	5.14E-04	192.2	
52	0	1461.23*	450	40	1.69	2921.38	2913	15	3.13E-02	5.8	
53	0	1497.79	12	25	1.42	2994.50	2989	12	8.67E-04	83.6	
54	0	1574.88	11	15	0.73	3148.65	3139	15	7.61E-04	82.7	
55	0	1589.20	30	17	1.79	3177.28	3168	12	2.09E-03	31.8	
56	1	1684.57*	8	13	2.14	3368.00	3359	19	5.66E-04	106.7	2.34E+00
57	1	1687.07*	10	6	2.14	3373.00	3359	19	6.70E-04	67.7	
58	0	1701.93	5	8	0.54	3402.73	3397	9	3.66E-04	100.8	
59	0	1765.11*	85	21	2.23	3529.07	3522	19	5.88E-03	17.8	
60	0	1831.34	12	11	2.84	3661.52	3651	14	8.47E-04	63.4	
61	4	1841.02	19	10	3.23	3680.87	3674	15	1.34E-03	40.0	1.94E+00
62	4	1843.42	8	1	2.03	3685.67	3674	15	5.50E-04	50.2	
63	0	1847.94	35	4	1.39	3694.72	3689	13	2.46E-03	19.9	
64	0	1886.80	4	16	0.53	3772.42	3764	12	3.00E-04	186.4	
65	0	1931.03	9	6	0.77	3860.88	3852	12	6.11E-04	65.3	
66	0	1984.29	9	7	1.53	3967.40	3962	9	6.51E-04	59.6	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701028       *
* Acquisition date : 14-DEC-2007 06:41:54 Detector SN#    :                 *
* Detector ID      : GAM07                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:27.11     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701028           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2323E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-OCT-2007 13:07:28 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.517E+00	6.966E-01	2.755E-01	0.000E+00
CS-137	2.440E-02	2.672E-02	3.527E-02	0.000E+00
TL-208	3.094E-01	4.962E-02	3.408E-02	0.000E+00
BI-212	7.315E-01	2.746E-01	2.624E-01	0.000E+00
PB-212	1.078E+00	9.147E-02	5.177E-02	0.000E+00
BI-214	7.532E-01	1.036E-01	6.092E-02	0.000E+00
PB-214	7.552E-01	9.092E-02	6.401E-02	0.000E+00
RA-223	3.217E-01	1.714E-01	1.715E-01	0.000E+00
AC-228	1.153E+00	1.832E-01	1.367E-01	0.000E+00
TH-234	1.226E+00	3.487E-01	3.690E-01	0.000E+00
U-235	9.264E-03	1.045E-01	1.743E-01	0.000E+00
NP-237	6.095E-01	1.345E-01	1.644E-01	0.000E+00
AM-243	1.613E-01	3.125E-02	3.707E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-1.161E-02		2.907E-02	3.910E-02	0.000E+00	NOT IDENT.
RH-101	-9.158E-03		1.965E-02	3.202E-02	0.000E+00	NOT IDENT.
SB-125	2.726E-02		5.284E-02	9.137E-02	0.000E+00	NOT IDENT.
EU-155	6.131E-02		5.525E-02	9.326E-02	0.000E+00	NOT IDENT.
PO-209	1.587E-01		4.354E+00	7.279E+00	0.000E+00	NOT IDENT.
BI-211	-4.635E-01		5.757E-01	8.978E-01	0.000E+00	NOT IDENT.
PA-233	-2.236E-02		3.220E-02	5.314E-02	0.000E+00	NOT IDENT.
PA-234M	1.586E+00		2.100E+00	3.741E+00	0.000E+00	NOT IDENT.
NP-236	-6.555E-03		3.308E-02	5.031E-02	0.000E+00	NOT IDENT.
NP-239	-7.695E-02		1.144E-01	1.950E-01	0.000E+00	NOT IDENT.
AM-241	-3.194E-02		5.348E-02	8.222E-02	0.000E+00	NOT IDENT.
CM-243	-1.258E-02		4.799E-02	8.149E-02	0.000E+00	NOT IDENT.
AM-246	1.132E-02		6.887E-02	1.199E-01	0.000E+00	NOT IDENT.
CF-249	-1.636E-02		2.413E-02	3.686E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:42:47.11

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701028.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 06:41:54
Sample ID        : G198701028           Sample quantity  : 1.23230E+02 GRAM
Detector name    : GAM07                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:27.11  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	450	10.66*	1.166E+00	5.517E+00	5.517E+00	12.88
CS-137	661.66	32	85.10*	2.329E+00	2.428E-02	2.440E-02	111.77
TL-208	277.36	78	6.31	4.658E+00	4.059E-01	4.059E-01	84.78
	510.77	108	22.60	2.898E+00	2.520E-01	2.520E-01	83.16
	583.19	445	84.50*	2.595E+00	3.094E-01	3.094E-01	16.36
	763.13	------	1.81	2.057E+00	------	Line Not Found	------
	860.56	31	12.42	1.848E+00	2.075E-01	2.075E-01	137.08
BI-212	727.33	122	11.80*	2.145E+00	7.315E-01	7.315E-01	38.30
	785.37	38	1.10	2.002E+00	2.629E+00	2.629E+00	91.94
	1620.50	------	1.49	1.077E+00	------	Line Not Found	------
PB-212	74.81	466	10.40	6.455E+00	1.058E+00	1.058E+00	19.77
	77.11	792	17.50	6.617E+00	1.042E+00	1.042E+00	13.78
	87.30	354	7.81	7.134E+00	9.678E-01	9.678E-01	22.52
	238.63	1591	43.30*	5.194E+00	1.078E+00	1.078E+00	8.66
	300.09	104	3.28	4.402E+00	1.098E+00	1.098E+00	51.13
BI-214	609.31	570	46.10*	2.500E+00	7.531E-01	7.532E-01	14.04
	768.36	79	4.94	2.045E+00	1.186E+00	1.186E+00	49.57
	806.17	------	1.22	1.959E+00	------	Line Not Found	------
	934.06	------	3.03	1.718E+00	------	Line Not Found	------
	1120.29	117	15.10	1.460E+00	8.085E-01	8.085E-01	31.19
	1155.19	------	1.63	1.422E+00	------	Line Not Found	------
	1238.11	65	5.79	1.338E+00	1.271E+00	1.271E+00	49.88
	1280.96	------	1.43	1.300E+00	------	Line Not Found	------
	1377.67	35	4.00	1.223E+00	1.079E+00	1.079E+00	67.96
	1401.50	7	1.27	1.206E+00	7.365E-01	7.365E-01	384.49
	1407.98	------	2.15	1.201E+00	------	Line Not Found	------
	1509.23	------	2.11	1.136E+00	------	Line Not Found	------
	1729.60	------	2.92	1.029E+00	------	Line Not Found	------
	1764.49	85	15.40	1.015E+00	8.245E-01	8.246E-01	35.96
PB-214	74.81	466	6.44	6.455E+00	1.709E+00	1.709E+00	19.77
	77.11	792	10.80	6.617E+00	1.688E+00	1.688E+00	13.78
	87.30	354	4.84	7.134E+00	1.562E+00	1.562E+00	22.52

Sample ID : G198701028 Acquisition date : 14-DEC-2007 06:41:54

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	396	7.43	5.149E+00	1.577E+00	1.577E+00	23.36
	295.22	474	19.30	4.457E+00	8.384E-01	8.385E-01	16.34
	351.93	727	37.60*	3.902E+00	7.551E-01	7.552E-01	12.29
RA-223	269.46	137	13.70*	4.748E+00	3.217E-01	3.217E-01	54.37
AC-228	129.07	86	2.42	7.219E+00	7.504E-01	7.504E-01	80.68
	209.25	196	3.89	5.671E+00	1.352E+00	1.352E+00	38.63
	270.25	137	3.46	4.748E+00	1.274E+00	1.274E+00	54.37
	338.32	315	11.27	4.022E+00	1.059E+00	1.059E+00	21.65
	409.46	75	1.92	3.465E+00	1.728E+00	1.728E+00	48.07
	463.00	126	4.40	3.142E+00	1.385E+00	1.385E+00	39.23
	794.95	116	4.25	1.982E+00	2.089E+00	2.089E+00	38.19
	911.20	343	25.80*	1.756E+00	1.153E+00	1.153E+00	16.22
	964.77	45	4.99	1.668E+00	8.239E-01	8.239E-01	72.15
	968.97	217	15.80	1.662E+00	1.260E+00	1.260E+00	19.10
	1588.20	30	3.22	1.093E+00	1.305E+00	1.305E+00	63.87
TH-234	63.29	81	4.80	5.290E+00	4.843E-01	4.843E-01	101.55
	92.58	318	5.41*	7.293E+00	1.226E+00	1.226E+00	29.01
U-235	143.76	5	10.96*	6.951E+00	9.264E-03	9.264E-03	1150.80
NP-237	86.48	354	12.40*	7.134E+00	6.095E-01	6.095E-01	22.52
AM-243	74.66	466	68.20*	6.455E+00	1.613E-01	1.613E-01	19.77

Flag: "*" = Keyline

Sample ID : G198701028 Acquisition date : 14-DEC-2007 06:41:54

Total number of lines in spectrum 66
Number of unidentified lines 29
Number of lines tentatively identified by NID 37 56.06%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.517E+00	5.517E+00	0.711E+00	12.88	
CS-137	9.47E+08S	1.00	2.428E-02	2.440E-02	2.727E-02	111.77	
TL-208	4.43E+17S	1.00	3.094E-01	3.094E-01	0.506E-01	16.36	
BI-212	4.43E+17S	1.00	7.315E-01	7.315E-01	2.802E-01	38.30	
PB-212	4.43E+17S	1.00	1.078E+00	1.078E+00	0.093E+00	8.66	
BI-214	5.05E+10S	1.00	7.531E-01	7.532E-01	1.058E-01	14.04	
PB-214	5.05E+10S	1.00	7.551E-01	7.552E-01	0.928E-01	12.29	
RA-223	1.04E+12S	1.00	3.217E-01	3.217E-01	1.749E-01	54.37	
AC-228	4.43E+17S	1.00	1.153E+00	1.153E+00	0.187E+00	16.22	
TH-234	1.41E+17S	1.00	1.226E+00	1.226E+00	0.356E+00	29.01	
U-235	2.22E+16S	1.00	9.264E-03	9.264E-03	106.6E-03	1150.80	
NP-237	6.75E+13S	1.00	6.095E-01	6.095E-01	1.373E-01	22.52	
AM-243	2.33E+11S	1.00	1.613E-01	1.613E-01	0.319E-01	19.77	
			---	---			
	Total Activity :		1.265E+01	1.265E+01			

Grand Total Activity : 1.265E+01 1.265E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701028 Acquisition date : 14-DEC-2007 06:41:54

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.43	36	440	1.03	92.37	88	9	2.48E-03	****	2.58E+00	
6	72.51	84	313	1.74	144.52	142	17	5.84E-03	62.5	6.25E+00	
2	84.47	97	523	1.22	168.42	164	28	6.77E-03	81.3	7.02E+00	
2	90.05	223	398	1.06	179.59	164	28	1.55E-02	31.8	7.22E+00	
0	115.44	111	406	1.97	230.35	226	9	7.68E-03	69.1	7.40E+00	
0	154.14	130	527	1.19	307.74	302	12	9.01E-03	72.9	6.75E+00	
0	186.11	255	371	1.07	371.66	367	9	1.77E-02	32.3	6.11E+00	
0	328.48	117	211	1.28	656.31	651	11	8.09E-03	53.8	4.12E+00	
0	562.10	24	104	1.35	1123.45	1120	10	1.66E-03	****	2.68E+00	
0	630.22	14	83	0.60	1259.65	1253	11	9.61E-04	****	2.43E+00	
0	636.79	82	114	4.04	1272.78	1264	20	5.66E-03	68.1	2.41E+00	
1	772.26	50	64	1.84	1543.67	1530	26	3.46E-03	67.2	2.04E+00	
0	936.14	25	62	1.52	1871.35	1862	12	1.70E-03	****	1.71E+00	
0	1016.81	16	45	2.48	2032.67	2024	13	1.11E-03	****	1.59E+00	
0	1052.72	52	55	4.51	2104.48	2093	22	3.64E-03	77.1	1.54E+00	
0	1151.85	18	35	2.85	2302.70	2295	12	1.22E-03	****	1.43E+00	
0	1225.30	34	53	7.45	2449.59	2439	19	2.39E-03	****	1.35E+00	
0	1497.79	12	25	1.42	2994.50	2989	12	8.67E-04	****	1.14E+00	
0	1574.88	11	15	0.73	3148.65	3139	15	7.61E-04	****	1.10E+00	
1	1684.57	8	13	2.14	3368.00	3359	19	5.66E-04	****	1.05E+00	
1	1687.07	10	6	2.14	3373.00	3359	19	6.70E-04	****	1.05E+00	
0	1701.93	5	8	0.54	3402.73	3397	9	3.66E-04	****	1.04E+00	
0	1831.34	12	11	2.84	3661.52	3651	14	8.47E-04	****	9.92E-01	
4	1841.02	19	10	3.23	3680.87	3674	15	1.34E-03	80.0	9.89E-01	
4	1843.42	8	1	2.03	3685.67	3674	15	5.50E-04	****	9.88E-01	
0	1847.94	35	4	1.39	3694.72	3689	13	2.46E-03	39.8	9.87E-01	
0	1886.80	4	16	0.53	3772.42	3764	12	3.00E-04	****	9.75E-01	
0	1931.03	9	6	0.77	3860.88	3852	12	6.11E-04	****	9.62E-01	
0	1984.29	9	7	1.53	3967.40	3962	9	6.51E-04	****	9.48E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701028            *
* Acquisition date : 14-DEC-2007 06:41:54 Detector SN#    :                 *
* Detector ID      : GAM07                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:27.11     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701028           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2323E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 31-OCT-2007 13:07:28 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.517E+00	6.966E-01	1.378E-01	6.966E-01
CS-137	2.440E-02	2.672E-02	1.764E-02	2.672E-02
TL-208	3.094E-01	4.962E-02	1.705E-02	4.962E-02
BI-212	7.315E-01	2.746E-01	1.313E-01	2.746E-01
PB-212	1.078E+00	9.147E-02	2.590E-02	9.147E-02
BI-214	7.532E-01	1.036E-01	3.048E-02	1.036E-01
PB-214	7.552E-01	9.092E-02	3.203E-02	9.092E-02
RA-223	3.217E-01	1.714E-01	8.581E-02	1.714E-01
AC-228	1.153E+00	1.832E-01	6.840E-02	1.832E-01
TH-234	1.226E+00	3.487E-01	1.846E-01	3.487E-01
U-235	9.264E-03	1.045E-01	8.720E-02	1.045E-01
NP-237	6.095E-01	1.345E-01	8.226E-02	1.345E-01
AM-243	1.613E-01	3.125E-02	1.855E-02	3.125E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-1.161E-02	2.907E-02	1.956E-02	2.907E-02	NOT IDENT.
RH-101	-9.158E-03	1.965E-02	1.602E-02	1.965E-02	NOT IDENT.
SB-125	2.726E-02	5.284E-02	4.571E-02	5.284E-02	NOT IDENT.
EU-155	6.131E-02	5.525E-02	4.666E-02	5.525E-02	NOT IDENT.
PO-209	1.587E-01	4.354E+00	3.642E+00	4.354E+00	NOT IDENT.
BI-211	-4.635E-01	5.757E-01	4.492E-01	5.757E-01	NOT IDENT.
PA-233	-2.236E-02	3.220E-02	2.659E-02	3.220E-02	NOT IDENT.
PA-234M	1.586E+00	2.100E+00	1.872E+00	2.100E+00	NOT IDENT.
NP-236	-6.555E-03	3.308E-02	2.517E-02	3.308E-02	NOT IDENT.
NP-239	-7.695E-02	1.144E-01	9.755E-02	1.144E-01	NOT IDENT.
AM-241	-3.194E-02	5.348E-02	4.114E-02	5.348E-02	NOT IDENT.
CM-243	-1.258E-02	4.799E-02	4.077E-02	4.799E-02	NOT IDENT.
AM-246	1.132E-02	6.887E-02	5.999E-02	6.887E-02	NOT IDENT.
CF-249	-1.636E-02	2.413E-02	1.844E-02	2.413E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	399.1732
63.29	402.7115
74.66	489.0728
74.81	489.2260
74.81	489.2260
77.11	491.5377
77.11	491.5377
86.48	389.1406
87.30	389.7402
87.30	389.7402
92.58	393.5313
98.44	383.6347
103.76	371.9614
105.31	306.9236
129.07	372.6641
143.76	332.6355
198.00	330.8286
209.25	271.9191
228.18	269.7610
238.63	258.5928
242.00	259.4003
269.46	239.9779
270.25	235.5803
277.36	229.3506
295.22	189.2787
300.09	165.0919
312.17	171.9559
338.32	170.3191
351.93	169.9534
387.59	166.8419
409.46	166.0355
427.87	127.5385
463.00	106.3262
510.77	125.8534
583.19	109.0261
609.31	96.3387
661.66	94.7848
727.33	86.5885
763.13	74.8425
768.36	89.9912
785.37	63.7384
794.95	62.6221
806.17	61.8682
831.80	81.9023
860.56	62.0566
896.60	72.2580
911.20	75.7723
934.06	43.4764
964.77	64.2598
968.97	58.9840
1001.03	36.8322
1078.86	47.1318
1120.29	40.0809
1155.19	43.7111
1173.23	51.2512
1238.11	41.3853
1280.96	49.7943
1332.51	32.6361
1377.67	27.4252
1401.50	37.9230
1407.98	31.4209
1460.80	23.4473
1509.23	13.3973
1588.20	41.3361
1620.50	21.1100
1729.60	20.5037
1764.49	26.0771

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701028

Total Uranium Activity	4.2862E-03	ug/g
Total Uranium Counting Unc.	4.8339E-02	ug/g
Total Uranium Tpu	4.8339E-08	ug/g
Total Uranium Mda	4.0347E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:43:48.38

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701029.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 06:43:16
Sample ID        : G198701029           Sample quantity  : 1.41790E+02 GRAM
Detector name    : GAM12                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.06  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.17*	68	427	1.44	125.57	122	7	4.70E-03	57.4	
2	4	74.82*	292	475	1.02	148.88	144	14	2.03E-02	13.5	1.10E+00
3	4	77.16	542	448	1.08	153.56	144	14	3.77E-02	7.7	
4	4	84.11*	137	612	1.62	167.47	160	35	9.48E-03	36.1	1.34E+00
5	4	87.32	276	474	1.35	173.89	160	35	1.91E-02	14.9	
6	4	89.99	179	401	1.20	179.23	160	35	1.24E-02	20.2	
7	4	92.78*	183	441	1.31	184.80	160	35	1.27E-02	26.0	
8	0	129.42	85	431	1.00	258.12	254	8	5.87E-03	44.0	
9	0	153.65	112	479	2.29	306.60	302	10	7.80E-03	37.6	
10	0	163.24	44	318	0.91	325.80	323	7	3.07E-03	68.1	
11	0	185.94*	295	573	1.16	371.20	365	13	2.05E-02	18.9	
12	0	198.76*	21	262	1.10	396.86	395	6	1.49E-03	126.9	
13	0	209.54	141	376	1.15	418.42	414	10	9.78E-03	27.2	
14	4	238.58*	1285	277	1.25	476.53	469	19	8.92E-02	3.8	1.23E+00
15	4	241.66	345	330	1.72	482.67	469	19	2.40E-02	12.1	
16	0	270.48*	131	399	1.63	540.33	532	14	9.11E-03	34.6	
17	0	277.46	42	242	1.40	554.31	551	8	2.90E-03	66.4	
18	0	295.12*	525	241	1.24	589.64	585	9	3.64E-02	7.2	
19	0	300.92	184	308	3.58	601.25	595	14	1.28E-02	21.7	
20	0	328.37	39	202	0.89	656.15	653	8	2.73E-03	64.6	
21	0	338.34	197	259	0.95	676.10	672	10	1.37E-02	16.9	
22	0	351.85*	928	259	1.31	703.12	697	13	6.45E-02	5.0	
23	0	374.20	44	190	2.78	747.83	743	11	3.02E-03	63.1	
24	3	405.61	28	73	1.54	810.67	808	14	1.98E-03	49.6	1.22E+00
25	3	409.05	41	132	1.95	817.56	808	14	2.82E-03	51.1	
26	0	432.07	31	133	0.75	863.60	859	9	2.12E-03	70.4	
27	0	462.89	84	195	1.42	925.26	918	13	5.85E-03	35.9	
28	0	469.32	60	160	4.63	938.12	932	13	4.13E-03	46.0	
29	0	510.86*	96	226	1.98	1021.21	1014	15	6.64E-03	44.0	
30	0	583.00*	371	164	1.51	1165.52	1157	16	2.58E-02	9.7	
31	0	609.17*	604	153	1.67	1217.85	1212	13	4.19E-02	6.3	
32	0	661.32*	337	117	1.61	1322.17	1315	12	2.34E-02	8.8	
33	0	727.22	113	67	1.27	1453.97	1449	12	7.82E-03	17.5	
34	0	767.47*	46	126	0.88	1534.46	1526	15	3.16E-03	59.1	
35	0	795.00	66	96	2.16	1589.52	1580	17	4.55E-03	36.7	
36	0	860.96	54	90	1.57	1721.44	1714	14	3.76E-03	39.8	
37	0	910.78*	263	68	1.72	1821.08	1812	17	1.83E-02	10.1	
38	0	928.57	17	39	1.41	1856.66	1851	10	1.16E-03	75.0	

Sample ID : G198701029 Acquisition date : 14-DEC-2007 06:43:16

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	1	964.74	45	59	1.96	1928.98	1921	24	3.15E-03	37.5	1.23E+00
40	1	968.66	170	47	1.72	1936.81	1921	24	1.18E-02	10.8	
41	0	1030.44*	7	22	1.64	2060.35	2057	7	5.15E-04	134.0	
42	3	1061.29	14	16	1.49	2122.05	2120	12	9.54E-04	50.8	1.80E+00
43	3	1064.48	26	16	1.95	2128.43	2120	12	1.78E-03	32.9	
44	0	1079.21	28	27	2.84	2157.88	2152	12	1.95E-03	41.6	
45	0	1120.08*	167	64	2.05	2239.60	2232	19	1.16E-02	14.3	
46	0	1159.51	66	71	7.97	2318.44	2303	32	4.55E-03	40.7	
47	0	1210.62	10	36	1.31	2420.64	2413	10	6.82E-04	123.0	
48	0	1237.84	79	46	1.49	2475.06	2469	14	5.50E-03	21.3	
49	0	1281.11	24	42	1.54	2561.56	2553	14	1.66E-03	60.9	
50	0	1378.14	45	70	1.12	2755.56	2746	21	3.11E-03	48.5	
51	0	1392.15	16	24	3.75	2783.56	2773	16	1.14E-03	70.8	
52	0	1460.33*	454	43	2.13	2919.87	2910	22	3.15E-02	6.2	
53	0	1592.00	27	14	3.49	3183.08	3178	11	1.88E-03	32.8	
54	0	1629.85	26	10	4.89	3258.74	3252	13	1.83E-03	31.3	
55	0	1683.40	27	32	8.07	3365.77	3348	25	1.89E-03	58.6	
56	0	1729.11	34	16	3.26	3457.13	3451	12	2.33E-03	30.4	
57	0	1763.93*	107	13	2.12	3526.72	3520	13	7.44E-03	13.3	
58	0	1803.18	28	0	4.49	3605.18	3599	14	1.94E-03	18.9	
59	0	1839.87	13	9	1.16	3678.51	3674	10	9.15E-04	52.0	
60	0	1931.86*	8	14	0.55	3862.36	3852	14	5.31E-04	118.8	
61	0	2022.15	12	4	4.39	4042.78	4035	15	8.42E-04	45.2	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701029       *
* Acquisition date : 14-DEC-2007 06:43:16 Detector SN#    :                 *
* Detector ID      : GAM12                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.06     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701029           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4179E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  1-FEB-2007 15:01:06 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.974E+00	6.736E-01	2.607E-01	0.000E+00
RH-101	7.326E-03	1.823E-02	3.349E-02	0.000E+00
CS-137	2.344E-01	4.518E-02	3.501E-02	0.000E+00
TL-208	2.326E-01	4.766E-02	2.993E-02	0.000E+00
BI-212	6.096E-01	2.161E-01	2.351E-01	0.000E+00
PB-212	7.936E-01	7.591E-02	4.995E-02	0.000E+00
BI-214	7.196E-01	1.057E-01	6.106E-02	0.000E+00
PB-214	8.757E-01	9.977E-02	6.579E-02	0.000E+00
RA-223	2.796E-01	1.902E-01	1.617E-01	0.000E+00
AC-228	7.954E-01	1.772E-01	1.076E-01	0.000E+00
TH-234	7.452E-01	3.838E-01	4.307E-01	0.000E+00
NP-237	5.159E-01	1.561E-01	1.991E-01	0.000E+00
AM-243	1.217E-01	3.344E-02	4.775E-02	0.000E+00
AM-246	9.133E-02	7.482E-02	1.038E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	3.054E-02		2.231E-02	4.171E-02	0.000E+00	NOT IDENT.
SB-125	4.795E-02		5.812E-02	9.114E-02	0.000E+00	NOT IDENT.
EU-155	2.093E-02		5.428E-02	1.009E-01	0.000E+00	NOT IDENT.
PO-209	9.426E-01		3.789E+00	6.506E+00	0.000E+00	NOT IDENT.
BI-211	-1.320E-01		5.566E-01	9.243E-01	0.000E+00	NOT IDENT.
PA-233	2.554E-02		3.531E-02	6.287E-02	0.000E+00	NOT IDENT.
PA-234M	1.758E+00		2.778E+00	4.430E+00	0.000E+00	NOT IDENT.
U-235	-5.373E-02		1.109E-01	1.870E-01	0.000E+00	NOT IDENT.
NP-236	2.421E-02		3.585E-02	5.645E-02	0.000E+00	NOT IDENT.
NP-239	1.914E-02		1.185E-01	2.099E-01	0.000E+00	NOT IDENT.
AM-241	2.270E-02		8.386E-02	1.332E-01	0.000E+00	NOT IDENT.
CM-243	3.143E-02		5.207E-02	9.110E-02	0.000E+00	NOT IDENT.
CF-249	2.840E-02		2.122E-02	3.858E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 10:43:49.36

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701029.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 06:43:16
Sample ID        : G198701029           Sample quantity  : 1.41790E+02 GRAM
Detector name    : GAM12                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.06  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	454	10.66*	1.134E+00	4.974E+00	4.974E+00	13.82
RH-101	198.00	21	73.00*	5.564E+00	7.007E-03	7.326E-03	253.93
CS-137	661.66	337	85.10*	2.248E+00	2.333E-01	2.344E-01	19.67
TL-208	277.36	42	6.31	4.452E+00	1.967E-01	1.967E-01	132.93
	510.77	96	22.60	2.786E+00	2.011E-01	2.011E-01	88.36
	583.19	371	84.50*	2.500E+00	2.326E-01	2.326E-01	20.91
	763.13	------	1.81	1.987E+00	------	Line Not Found	------
	860.56	54	12.42	1.787E+00	3.226E-01	3.226E-01	80.19
BI-212	727.33	113	11.80*	2.072E+00	6.096E-01	6.096E-01	36.18
	785.37	------	1.10	1.938E+00	------	Line Not Found	------
	1620.50	------	1.49	1.052E+00	------	Line Not Found	------
PB-212	74.81	292	10.40	4.658E+00	7.983E-01	7.983E-01	28.03
	77.11	542	17.50	4.892E+00	8.384E-01	8.384E-01	17.04
	87.30	276	7.81	5.705E+00	8.191E-01	8.191E-01	30.88
	238.63	1285	43.30*	4.950E+00	7.936E-01	7.936E-01	9.76
	300.09	184	3.28	4.197E+00	1.770E+00	1.770E+00	43.82
BI-214	609.31	604	46.10*	2.410E+00	7.196E-01	7.196E-01	14.99
	768.36	46	4.94	1.977E+00	6.170E-01	6.170E-01	118.59
	806.17	------	1.22	1.894E+00	------	Line Not Found	------
	934.06	------	3.03	1.662E+00	------	Line Not Found	------
	1120.29	167	15.10	1.414E+00	1.035E+00	1.035E+00	29.47
	1155.19	------	1.63	1.377E+00	------	Line Not Found	------
	1238.11	79	5.79	1.297E+00	1.395E+00	1.395E+00	43.04
	1280.96	24	1.43	1.260E+00	1.761E+00	1.761E+00	121.93
	1377.67	45	4.00	1.187E+00	1.250E+00	1.250E+00	97.29
	1401.50	------	1.27	1.171E+00	------	Line Not Found	------
	1407.98	------	2.15	1.166E+00	------	Line Not Found	------
	1509.23	------	2.11	1.106E+00	------	Line Not Found	------
	1729.60	34	2.92	1.009E+00	1.506E+00	1.506E+00	61.13
	1764.49	107	15.40	9.975E-01	9.230E-01	9.230E-01	27.23
PB-214	74.81	292	6.44	4.658E+00	1.289E+00	1.289E+00	28.03
	77.11	542	10.80	4.892E+00	1.358E+00	1.359E+00	17.04

Sample ID : G198701029 Acquisition date : 14-DEC-2007 06:43:16

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	276	4.84	5.705E+00	1.322E+00	1.322E+00	30.88
	242.00	345	7.43	4.907E+00	1.253E+00	1.253E+00	25.04
	295.22	525	19.30	4.257E+00	8.453E-01	8.453E-01	15.66
	351.93	928	37.60*	3.733E+00	8.756E-01	8.757E-01	11.63
RA-223	269.46	131	13.70*	4.535E+00	2.796E-01	2.796E-01	69.43
AC-228	129.07	85	2.42	6.592E+00	7.014E-01	7.014E-01	88.27
	209.25	141	3.89	5.388E+00	8.891E-01	8.891E-01	54.75
	270.25	131	3.46	4.535E+00	1.107E+00	1.107E+00	69.43
	338.32	197	11.27	3.845E+00	6.016E-01	6.016E-01	34.39
	409.46	41	1.92	3.324E+00	8.416E-01	8.416E-01	102.36
	463.00	84	4.40	3.016E+00	8.397E-01	8.397E-01	72.06
	794.95	66	4.25	1.917E+00	1.065E+00	1.065E+00	73.97
	911.20	263	25.80*	1.699E+00	7.954E-01	7.954E-01	22.73
	964.77	45	4.99	1.614E+00	7.460E-01	7.460E-01	75.65
	968.97	170	15.80	1.609E+00	8.861E-01	8.861E-01	23.74
	1588.20	------	3.22	1.066E+00	------ Line Not Found		------
TH-234	63.29	68	4.80	3.240E+00	5.755E-01	5.755E-01	114.96
	92.58	183	5.41*	6.013E+00	7.452E-01	7.452E-01	52.56
NP-237	86.48	276	12.40*	5.705E+00	5.159E-01	5.159E-01	30.88
AM-243	74.66	292	68.20*	4.658E+00	1.217E-01	1.217E-01	28.03
AM-246	1078.86	28	27.80*	1.461E+00	9.132E-02	9.133E-02	83.60

Flag: "*" = Keyline

Sample ID : G198701029 Acquisition date : 14-DEC-2007 06:43:16

Total number of lines in spectrum 61
Number of unidentified lines 24
Number of lines tentatively identified by NID 37 60.66%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.974E+00	4.974E+00	0.687E+00	13.82	
RH-101	1.04E+08S	1.05	7.007E-03	7.326E-03	18.60E-03	253.93	
CS-137	9.47E+08S	1.00	2.333E-01	2.344E-01	0.461E-01	19.67	
TL-208	4.43E+17S	1.00	2.326E-01	2.326E-01	0.486E-01	20.91	
BI-212	4.43E+17S	1.00	6.096E-01	6.096E-01	2.205E-01	36.18	
PB-212	4.43E+17S	1.00	7.936E-01	7.936E-01	0.775E-01	9.76	
BI-214	5.05E+10S	1.00	7.196E-01	7.196E-01	1.079E-01	14.99	
PB-214	5.05E+10S	1.00	8.756E-01	8.757E-01	1.018E-01	11.63	
RA-223	1.04E+12S	1.00	2.796E-01	2.796E-01	1.941E-01	69.43	
AC-228	4.43E+17S	1.00	7.954E-01	7.954E-01	1.808E-01	22.73	
TH-234	1.41E+17S	1.00	7.452E-01	7.452E-01	3.916E-01	52.56	
NP-237	6.75E+13S	1.00	5.159E-01	5.159E-01	1.593E-01	30.88	
AM-243	2.33E+11S	1.00	1.217E-01	1.217E-01	0.341E-01	28.03	
AM-246	2.18E+11S	1.00	9.132E-02	9.133E-02	7.635E-02	83.60	
			---	---			
	Total Activity :		1.099E+01	1.100E+01			

Grand Total Activity : 1.099E+01 1.100E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701029 Acquisition date : 14-DEC-2007 06:43:16

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	84.11	137	612	1.62	167.47	160	35	9.48E-03	72.2	5.48E+00	
4	89.99	179	401	1.20	179.23	160	35	1.24E-02	40.3	5.87E+00	
0	153.65	112	479	2.29	306.60	302	10	7.80E-03	75.2	6.32E+00	
0	163.24	44	318	0.91	325.80	323	7	3.07E-03	****	6.17E+00	
0	185.94	295	573	1.16	371.20	365	13	2.05E-02	37.8	5.78E+00	
0	328.37	39	202	0.89	656.15	653	8	2.73E-03	****	3.93E+00	
0	374.20	44	190	2.78	747.83	743	11	3.02E-03	****	3.56E+00	
3	405.61	28	73	1.54	810.67	808	14	1.98E-03	99.2	3.35E+00	
0	432.07	31	133	0.75	863.60	859	9	2.12E-03	****	3.18E+00	
0	469.32	60	160	4.63	938.12	932	13	4.13E-03	91.9	2.98E+00	
0	928.57	17	39	1.41	1856.66	1851	10	1.16E-03	****	1.67E+00	
0	1030.44	7	22	1.64	2060.35	2057	7	5.15E-04	****	1.52E+00	
3	1061.29	14	16	1.49	2122.05	2120	12	9.54E-04	****	1.48E+00	
3	1064.48	26	16	1.95	2128.43	2120	12	1.78E-03	65.8	1.48E+00	
0	1159.51	66	71	7.97	2318.44	2303	32	4.55E-03	81.4	1.37E+00	
0	1210.62	10	36	1.31	2420.64	2413	10	6.82E-04	****	1.32E+00	
0	1392.15	16	24	3.75	2783.56	2773	16	1.14E-03	****	1.18E+00	
0	1592.00	27	14	3.49	3183.08	3178	11	1.88E-03	65.7	1.06E+00	
0	1629.85	26	10	4.89	3258.74	3252	13	1.83E-03	62.5	1.05E+00	
0	1683.40	27	32	8.07	3365.77	3348	25	1.89E-03	****	1.03E+00	
0	1803.18	28	0	4.49	3605.18	3599	14	1.94E-03	37.8	9.85E-01	
0	1839.87	13	9	1.16	3678.51	3674	10	9.15E-04	****	9.75E-01	
0	1931.86	8	14	0.55	3862.36	3852	14	5.31E-04	****	9.52E-01	
0	2022.15	12	4	4.39	4042.78	4035	15	8.42E-04	90.4	9.35E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701029            *
* Acquisition date : 14-DEC-2007 06:43:16 Detector SN#    :                 *
* Detector ID      : GAM12                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.06     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701029           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4179E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  1-FEB-2007 15:01:06 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.974E+00	6.736E-01	1.304E-01	6.736E-01
RH-101	7.326E-03	1.823E-02	1.676E-02	1.823E-02
CS-137	2.344E-01	4.518E-02	1.752E-02	4.518E-02
TL-208	2.326E-01	4.766E-02	1.498E-02	4.766E-02
BI-212	6.096E-01	2.161E-01	1.176E-01	2.161E-01
PB-212	7.936E-01	7.591E-02	2.499E-02	7.591E-02
BI-214	7.196E-01	1.057E-01	3.055E-02	1.057E-01
PB-214	8.757E-01	9.977E-02	3.292E-02	9.977E-02
RA-223	2.796E-01	1.902E-01	8.092E-02	1.902E-01
AC-228	7.954E-01	1.772E-01	5.383E-02	1.772E-01
TH-234	7.452E-01	3.838E-01	2.155E-01	3.838E-01
NP-237	5.159E-01	1.561E-01	9.961E-02	1.561E-01
AM-243	1.217E-01	3.344E-02	2.389E-02	3.344E-02
AM-246	9.133E-02	7.482E-02	5.194E-02	7.482E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	3.054E-02	2.231E-02	2.087E-02	2.231E-02	NOT IDENT.
SB-125	4.795E-02	5.812E-02	4.559E-02	5.812E-02	NOT IDENT.
EU-155	2.093E-02	5.428E-02	5.049E-02	5.428E-02	NOT IDENT.
PO-209	9.426E-01	3.789E+00	3.255E+00	3.789E+00	NOT IDENT.
BI-211	-1.320E-01	5.566E-01	4.624E-01	5.566E-01	NOT IDENT.
PA-233	2.554E-02	3.531E-02	3.145E-02	3.531E-02	NOT IDENT.
PA-234M	1.758E+00	2.778E+00	2.216E+00	2.778E+00	NOT IDENT.
U-235	-5.373E-02	1.109E-01	9.353E-02	1.109E-01	NOT IDENT.
NP-236	2.421E-02	3.585E-02	2.824E-02	3.585E-02	NOT IDENT.
NP-239	1.914E-02	1.185E-01	1.050E-01	1.185E-01	NOT IDENT.
AM-241	2.270E-02	8.386E-02	6.664E-02	8.386E-02	NOT IDENT.
CM-243	3.143E-02	5.207E-02	4.558E-02	5.207E-02	NOT IDENT.
CF-249	2.840E-02	2.122E-02	1.930E-02	2.122E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	375.2166
63.29	458.4645
74.66	528.0817
74.81	528.2041
74.81	528.2041
77.11	530.0511
77.11	530.0511
86.48	452.5390
87.30	453.0562
87.30	453.0562
92.58	456.3392
98.44	376.8610
103.76	383.4961
105.31	399.4192
129.07	430.3803
143.76	420.6161
198.00	408.8776
209.25	355.8000
228.18	312.8275
238.63	277.5775
242.00	278.2547
269.46	247.1423
270.25	247.2764
277.36	234.1869
295.22	218.3500
300.09	201.6604
312.17	210.2358
338.32	226.1799
351.93	209.8205
387.59	143.3156
409.46	163.3699
427.87	136.4964
463.00	132.1719
510.77	144.5111
583.19	100.4904
609.31	115.8658
661.66	112.2457
727.33	83.8523
763.13	80.7930
768.36	96.1017
785.37	81.3633
794.95	70.3847
806.17	77.7942
831.80	86.6537
860.56	60.3421
896.60	65.1757
911.20	56.9993
934.06	47.8004
964.77	64.2671
968.97	64.3389
1001.03	58.3954
1078.86	45.9534
1120.29	44.5605
1155.19	52.4180
1173.23	48.1934
1238.11	48.6447
1280.96	42.9120
1332.51	37.9606
1377.67	29.4739
1401.50	49.3612
1407.98	29.6545
1460.80	25.9693
1509.23	34.2781
1588.20	45.5997
1620.50	21.3295
1729.60	25.1719
1764.49	28.9375

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701029

Total Uranium Activity	-2.4862E-02	ug/g
Total Uranium Counting Unc.	5.1301E-02	ug/g
Total Uranium Tpu	5.1301E-08	ug/g
Total Uranium Mda	4.3278E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 11:32:12.93

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701030.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 07:31:45
Sample ID        : G198701030           Sample quantity  : 1.48480E+02 GRAM
Detector name    : GAM19                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.07  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	58.14	47	243	1.38	115.91	113	6	3.25E-03	54.6	
2	0	63.24*	39	470	1.08	126.09	123	8	2.73E-03	105.5	
3	4	74.97*	269	391	1.01	149.52	144	16	1.87E-02	13.4	8.84E-01
4	4	77.20*	484	499	1.28	153.99	144	16	3.36E-02	9.8	
5	0	84.12*	57	336	1.33	167.81	165	6	3.96E-03	55.5	
6	0	87.13	162	413	1.38	173.83	171	7	1.12E-02	22.2	
7	0	93.45*	162	663	1.50	186.45	181	11	1.13E-02	34.7	
8	0	111.94	13	401	0.45	223.40	222	8	9.22E-04	262.0	
9	0	129.51	56	464	0.82	258.51	254	9	3.92E-03	69.9	
10	0	153.60	28	390	1.29	306.66	303	9	1.97E-03	127.4	
11	0	163.13	79	337	1.95	325.70	321	9	5.47E-03	43.6	
12	0	185.76*	254	424	1.90	370.91	366	11	1.77E-02	18.0	
13	0	204.42	47	312	0.84	408.21	403	9	3.27E-03	69.7	
14	0	209.46	138	293	1.19	418.29	414	9	9.61E-03	24.0	
15	2	238.63*	1190	247	1.47	476.59	468	20	8.27E-02	4.0	2.71E+00
16	2	241.73	337	236	1.73	482.78	468	20	2.34E-02	11.6	
17	0	270.10	152	264	2.19	539.48	534	11	1.05E-02	22.4	
18	0	277.62	78	231	2.32	554.50	550	10	5.41E-03	38.3	
19	1	295.25*	429	198	1.54	589.74	584	20	2.98E-02	8.0	1.63E+00
20	1	299.85	103	236	1.62	598.93	584	20	7.15E-03	28.8	
21	0	328.88	16	230	1.15	656.95	650	9	1.13E-03	170.2	
22	0	338.09	297	249	1.80	675.35	667	14	2.06E-02	12.7	
23	0	351.84*	729	228	1.44	702.84	696	14	5.06E-02	6.0	
24	0	409.28	45	113	1.13	817.65	814	8	3.11E-03	43.9	
25	1	463.34	72	100	1.52	925.68	920	19	5.00E-03	28.0	1.05E+00
26	1	466.65	42	95	1.74	932.32	920	19	2.91E-03	49.1	
27	0	510.84*	74	229	2.21	1020.63	1012	17	5.12E-03	57.9	
28	0	568.32*	150	196	1.71	1135.54	1127	19	1.04E-02	24.4	
29	0	583.56*	352	125	1.49	1166.00	1161	13	2.44E-02	8.9	
30	0	609.53*	484	144	1.55	1217.92	1211	14	3.36E-02	7.3	
31	0	638.94	39	77	3.99	1276.71	1270	11	2.69E-03	47.2	
32	3	661.89	298	98	1.81	1322.58	1316	35	2.07E-02	8.4	1.97E+00
33	3	675.16	31	17	2.25	1349.12	1316	35	2.14E-03	25.6	
34	0	727.81	128	85	1.80	1454.37	1448	14	8.92E-03	17.5	
35	0	759.02	11	65	0.70	1516.75	1509	10	7.84E-04	142.2	
36	0	766.99	101	79	6.05	1532.69	1522	19	7.00E-03	23.5	
37	0	784.91	39	108	6.81	1568.51	1557	18	2.71E-03	64.5	
38	0	795.28	86	56	3.31	1589.25	1582	16	5.97E-03	22.2	

Sample ID : G198701030 Acquisition date : 14-DEC-2007 07:31:45

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	2	861.22	52	49	2.02	1721.10	1716	18	3.58E-03	28.9	2.72E+00
40	2	864.69	25	47	2.15	1728.04	1716	18	1.74E-03	57.2	
41	0	893.27	47	32	0.89	1785.16	1778	12	3.25E-03	28.5	
42	0	911.98*	253	49	1.78	1822.57	1817	13	1.76E-02	9.1	
43	0	918.79*	8	35	1.60	1836.19	1832	8	5.37E-04	155.9	
44	0	936.23*	99	52	5.19	1871.07	1861	23	6.86E-03	22.3	
45	0	945.70	39	25	4.44	1890.00	1884	13	2.70E-03	31.4	
46	0	952.53	35	32	4.13	1903.65	1896	13	2.41E-03	37.8	
47	2	964.40	49	46	2.20	1927.38	1921	25	3.42E-03	32.8	1.26E+00
48	2	969.61	162	46	2.21	1937.82	1921	25	1.13E-02	11.7	
49	0	999.77*	20	58	7.14	1998.12	1988	18	1.36E-03	100.9	
50	0	1121.02	119	44	1.68	2240.57	2236	10	8.29E-03	13.9	
51	0	1239.59	37	59	0.81	2477.70	2469	13	2.53E-03	46.3	
52	0	1261.76	5	22	0.55	2522.02	2517	8	3.16E-04	185.0	
53	3	1378.82	45	16	2.63	2756.16	2746	26	3.10E-03	27.6	1.04E+00
54	3	1383.90	16	12	2.39	2766.32	2746	26	1.14E-03	53.1	
55	0	1408.86	42	27	4.31	2816.24	2808	18	2.92E-03	32.9	
56	0	1461.78*	425	63	1.81	2922.08	2913	19	2.95E-02	6.7	
57	0	1500.94	14	52	2.31	3000.43	2988	23	9.40E-04	140.9	
58	0	1544.44	17	7	1.27	3087.44	3083	10	1.18E-03	38.4	
59	0	1557.65	23	2	3.93	3113.85	3109	10	1.57E-03	24.6	
60	0	1565.33	10	8	2.36	3129.22	3125	10	6.85E-04	61.5	
61	0	1589.23	27	15	1.41	3177.04	3172	10	1.87E-03	33.0	
62	4	1604.92	14	7	2.25	3208.41	3202	15	1.01E-03	51.8	8.59E-01
63	4	1607.50	12	1	1.46	3213.58	3202	15	8.22E-04	38.8	
64	0	1622.60	28	23	2.86	3243.79	3232	18	1.91E-03	44.7	
65	0	1633.05	28	14	2.12	3264.70	3258	16	1.93E-03	37.1	
66	0	1662.57*	6	7	1.48	3323.75	3319	10	4.48E-04	114.1	
67	0	1680.17	12	7	3.78	3358.96	3351	13	7.99E-04	54.4	
68	0	1765.52	100	22	1.75	3529.72	3522	17	6.97E-03	14.5	
69	0	1784.39	11	13	3.35	3567.45	3559	13	7.64E-04	74.0	
70	0	1843.62	12	3	0.67	3685.95	3682	8	8.06E-04	41.3	
71	0	1873.80	12	17	2.24	3746.34	3734	15	8.58E-04	80.6	
72	0	2001.86	10	4	1.35	4002.58	3998	9	7.14E-04	47.8	
73	0	2017.84	15	6	3.49	4034.57	4027	13	1.04E-03	43.4	
74	0	2035.42	16	8	0.55	4069.74	4061	15	1.08E-03	46.1	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701030       *
* Acquisition date : 14-DEC-2007 07:31:45 Detector SN#    :                 *
* Detector ID      : GAM19                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.07     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701030           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4848E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  6-MAR-2007 21:45:12 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.242E+00	6.168E-01	2.641E-01	0.000E+00
CS-137	1.889E-01	3.442E-02	3.031E-02	0.000E+00
TL-208	2.018E-01	3.809E-02	2.965E-02	0.000E+00
BI-212	6.344E-01	2.247E-01	2.093E-01	0.000E+00
PB-212	6.760E-01	6.796E-02	4.338E-02	0.000E+00
BI-214	5.272E-01	8.549E-02	5.547E-02	0.000E+00
PB-214	6.323E-01	8.310E-02	5.519E-02	0.000E+00
RA-223	2.969E-01	1.315E-01	1.502E-01	0.000E+00
AC-228	6.964E-01	1.433E-01	1.047E-01	0.000E+00
PA-234M	1.797E+00	3.560E+00	3.122E+00	0.000E+00
TH-234	5.823E-01	3.973E-01	3.966E-01	0.000E+00
NP-237	2.684E-01	1.183E-01	1.742E-01	0.000E+00
AM-241	5.946E-02	6.378E-02	1.150E-01	0.000E+00
AM-243	9.821E-02	2.653E-02	4.096E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)	
CO-60	-5.192E-03		1.852E-02	3.102E-02	0.000E+00 NOT IDENT.
RH-101	1.074E-02		1.886E-02	2.985E-02	0.000E+00 NOT IDENT.
SB-125	1.878E-02		4.330E-02	7.838E-02	0.000E+00 NOT IDENT.
EU-155	5.607E-02		4.963E-02	9.291E-02	0.000E+00 NOT IDENT.
PO-209	5.832E-01		3.503E+00	5.188E+00	0.000E+00 NOT IDENT.
BI-211	-2.832E-01		5.056E-01	8.128E-01	0.000E+00 NOT IDENT.
PA-233	-1.403E-02		3.050E-02	5.068E-02	0.000E+00 NOT IDENT.
U-235	-7.321E-03		1.023E-01	1.719E-01	0.000E+00 NOT IDENT.
NP-236	2.004E-02		3.209E-02	5.054E-02	0.000E+00 NOT IDENT.
NP-239	1.872E-02		1.106E-01	1.935E-01	0.000E+00 NOT IDENT.
CM-243	-4.568E-03		4.461E-02	8.048E-02	0.000E+00 NOT IDENT.
AM-246	5.604E-02		5.666E-02	1.065E-01	0.000E+00 NOT IDENT.
CF-249	1.053E-02		1.800E-02	3.297E-02	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 11:32:13.98

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701030.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 07:31:45
Sample ID        : G198701030           Sample quantity  : 1.48480E+02 GRAM
Detector name    : GAM19                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.07  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	425	10.66*	1.188E+00	4.242E+00	4.242E+00	14.84
CS-137	661.66	298	85.10*	2.351E+00	1.880E-01	1.889E-01	18.59
TL-208	277.36	78	6.31	4.616E+00	3.382E-01	3.382E-01	76.83
	510.77	74	22.60	2.905E+00	1.421E-01	1.421E-01	116.01
	583.19	352	84.50*	2.609E+00	2.018E-01	2.018E-01	19.26
	763.13	------	1.81	2.083E+00	------	Line Not Found	------
	860.56	52	12.42	1.874E+00	2.804E-01	2.804E-01	58.71
BI-212	727.33	128	11.80*	2.169E+00	6.344E-01	6.344E-01	36.13
	785.37	39	1.10	2.032E+00	2.205E+00	2.205E+00	129.36
	1620.50	------	1.49	1.102E+00	------	Line Not Found	------
PB-212	74.81	269	10.40	5.079E+00	6.440E-01	6.440E-01	27.57
	77.11	484	17.50	5.316E+00	6.576E-01	6.576E-01	20.63
	87.30	162	7.81	6.150E+00	4.261E-01	4.261E-01	44.96
	238.63	1190	43.30*	5.140E+00	6.760E-01	6.760E-01	10.26
	300.09	103	3.28	4.364E+00	9.096E-01	9.096E-01	57.97
BI-214	609.31	484	46.10*	2.518E+00	5.271E-01	5.272E-01	16.55
	768.36	101	4.94	2.074E+00	1.244E+00	1.244E+00	47.97
	806.17	------	1.22	1.986E+00	------	Line Not Found	------
	934.06	------	3.03	1.744E+00	------	Line Not Found	------
	1120.29	119	15.10	1.484E+00	6.733E-01	6.733E-01	28.74
	1155.19	------	1.63	1.445E+00	------	Line Not Found	------
	1238.11	37	5.79	1.360E+00	5.861E-01	5.861E-01	92.73
	1280.96	------	1.43	1.322E+00	------	Line Not Found	------
	1377.67	45	4.00	1.244E+00	1.134E+00	1.134E+00	55.58
	1401.50	------	1.27	1.228E+00	------	Line Not Found	------
	1407.98	42	2.15	1.223E+00	2.019E+00	2.019E+00	66.02
	1509.23	------	2.11	1.160E+00	------	Line Not Found	------
	1729.60	------	2.92	1.057E+00	------	Line Not Found	------
	1764.49	100	15.40	1.045E+00	7.887E-01	7.888E-01	29.62
PB-214	74.81	269	6.44	5.079E+00	1.040E+00	1.040E+00	27.57
	77.11	484	10.80	5.316E+00	1.066E+00	1.066E+00	20.63
	87.30	162	4.84	6.150E+00	6.876E-01	6.877E-01	44.96

Sample ID : G198701030 Acquisition date : 14-DEC-2007 07:31:45

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	337	7.43	5.094E+00	1.126E+00	1.126E+00	24.05
	295.22	429	19.30	4.413E+00	6.359E-01	6.360E-01	17.21
	351.93	729	37.60*	3.874E+00	6.323E-01	6.323E-01	13.41
RA-223	269.46	152	13.70*	4.709E+00	2.969E-01	2.969E-01	45.19
AC-228	129.07	56	2.42	6.981E+00	4.223E-01	4.223E-01	140.00
	209.25	138	3.89	5.609E+00	8.015E-01	8.015E-01	48.33
	270.25	152	3.46	4.709E+00	1.175E+00	1.175E+00	45.19
	338.32	297	11.27	3.992E+00	8.353E-01	8.353E-01	26.04
	409.46	45	1.92	3.453E+00	8.535E-01	8.535E-01	87.96
	463.00	72	4.40	3.137E+00	6.591E-01	6.591E-01	56.26
	794.95	86	4.25	2.009E+00	1.273E+00	1.273E+00	45.49
	911.20	253	25.80*	1.782E+00	6.965E-01	6.964E-01	21.00
	964.77	49	4.99	1.695E+00	7.358E-01	7.358E-01	66.33
	968.97	162	15.80	1.687E+00	7.692E-01	7.692E-01	25.39
	1588.20	27	3.22	1.117E+00	9.486E-01	9.486E-01	66.33
PA-234M	1001.03	20	0.84*	1.642E+00	1.797E+00	1.797E+00	202.10
TH-234	63.29	39	4.80	3.545E+00	2.921E-01	2.921E-01	211.10
	92.58	162	5.41*	6.509E+00	5.823E-01	5.823E-01	69.62
NP-237	86.48	162	12.40*	6.150E+00	2.684E-01	2.684E-01	44.96
AM-241	59.54	47	35.90*	2.770E+00	5.944E-02	5.946E-02	109.45
AM-243	74.66	269	68.20*	5.079E+00	9.820E-02	9.821E-02	27.57

Flag: "*" = Keyline

Sample ID : G198701030 Acquisition date : 14-DEC-2007 07:31:45

Total number of lines in spectrum 74
Number of unidentified lines 36
Number of lines tentatively identified by NID 38 51.35%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.242E+00	4.242E+00	0.629E+00	14.84	
CS-137	9.47E+08S	1.00	1.880E-01	1.889E-01	0.351E-01	18.59	
TL-208	4.43E+17S	1.00	2.018E-01	2.018E-01	0.389E-01	19.26	
BI-212	4.43E+17S	1.00	6.344E-01	6.344E-01	2.292E-01	36.13	
PB-212	4.43E+17S	1.00	6.760E-01	6.760E-01	0.693E-01	10.26	
BI-214	5.05E+10S	1.00	5.271E-01	5.272E-01	0.872E-01	16.55	
PB-214	5.05E+10S	1.00	6.323E-01	6.323E-01	0.848E-01	13.41	
RA-223	1.04E+12S	1.00	2.969E-01	2.969E-01	1.341E-01	45.19	
AC-228	4.43E+17S	1.00	6.965E-01	6.964E-01	1.463E-01	21.00	
PA-234M	1.41E+17S	1.00	1.797E+00	1.797E+00	3.632E+00	202.10	
TH-234	1.41E+17S	1.00	5.823E-01	5.823E-01	4.054E-01	69.62	
NP-237	6.75E+13S	1.00	2.684E-01	2.684E-01	1.207E-01	44.96	
AM-241	1.36E+10S	1.00	5.944E-02	5.946E-02	6.508E-02	109.45	
AM-243	2.33E+11S	1.00	9.820E-02	9.821E-02	2.707E-02	27.57	
			---	---			
	Total Activity :		1.090E+01	1.090E+01			

Grand Total Activity : 1.090E+01 1.090E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701030 Acquisition date : 14-DEC-2007 07:31:45

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.12	57	336	1.33	167.81	165	6	3.96E-03	****	5.93E+00	
0	111.94	13	401	0.45	223.40	222	8	9.22E-04	****	7.00E+00	
0	153.60	28	390	1.29	306.66	303	9	1.97E-03	****	6.64E+00	
0	163.13	79	337	1.95	325.70	321	9	5.47E-03	87.2	6.47E+00	
0	185.76	254	424	1.90	370.91	366	11	1.77E-02	36.1	6.04E+00	
0	204.42	47	312	0.84	408.21	403	9	3.27E-03	****	5.70E+00	
0	328.88	16	230	1.15	656.95	650	9	1.13E-03	****	4.07E+00	
1	466.65	42	95	1.74	932.32	920	19	2.91E-03	98.1	3.12E+00	
0	568.32	150	196	1.71	1135.54	1127	19	1.04E-02	48.8	2.67E+00	
0	638.94	39	77	3.99	1276.71	1270	11	2.69E-03	94.5	2.42E+00	
3	675.16	31	17	2.25	1349.12	1316	35	2.14E-03	51.2	2.31E+00	
0	759.02	11	65	0.70	1516.75	1509	10	7.84E-04	****	2.09E+00	
2	864.69	25	47	2.15	1728.04	1716	18	1.74E-03	****	1.87E+00	
0	893.27	47	32	0.89	1785.16	1778	12	3.25E-03	57.0	1.81E+00	
0	918.79	8	35	1.60	1836.19	1832	8	5.37E-04	****	1.77E+00	
0	936.23	99	52	5.19	1871.07	1861	23	6.86E-03	44.6	1.74E+00	
0	945.70	39	25	4.44	1890.00	1884	13	2.70E-03	62.8	1.73E+00	
0	952.53	35	32	4.13	1903.65	1896	13	2.41E-03	75.6	1.71E+00	
0	1261.76	5	22	0.55	2522.02	2517	8	3.16E-04	****	1.34E+00	
3	1383.90	16	12	2.39	2766.32	2746	26	1.14E-03	****	1.24E+00	
0	1500.94	14	52	2.31	3000.43	2988	23	9.40E-04	****	1.16E+00	
0	1544.44	17	7	1.27	3087.44	3083	10	1.18E-03	76.7	1.14E+00	
0	1557.65	23	2	3.93	3113.85	3109	10	1.57E-03	49.3	1.13E+00	
0	1565.33	10	8	2.36	3129.22	3125	10	6.85E-04	****	1.13E+00	
4	1604.92	14	7	2.25	3208.41	3202	15	1.01E-03	****	1.11E+00	
4	1607.50	12	1	1.46	3213.58	3202	15	8.22E-04	77.7	1.11E+00	
0	1622.60	28	23	2.86	3243.79	3232	18	1.91E-03	89.4	1.10E+00	
0	1633.05	28	14	2.12	3264.70	3258	16	1.93E-03	74.1	1.10E+00	
0	1662.57	6	7	1.48	3323.75	3319	10	4.48E-04	****	1.08E+00	
0	1680.17	12	7	3.78	3358.96	3351	13	7.99E-04	****	1.08E+00	
0	1784.39	11	13	3.35	3567.45	3559	13	7.64E-04	****	1.04E+00	
0	1843.62	12	3	0.67	3685.95	3682	8	8.06E-04	82.7	1.02E+00	
0	1873.80	12	17	2.24	3746.34	3734	15	8.58E-04	****	1.01E+00	
0	2001.86	10	4	1.35	4002.58	3998	9	7.14E-04	95.5	9.83E-01	
0	2017.84	15	6	3.49	4034.57	4027	13	1.04E-03	86.8	9.81E-01	
0	2035.42	16	8	0.55	4069.74	4061	15	1.08E-03	92.3	9.78E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701030            *
* Acquisition date : 14-DEC-2007 07:31:45 Detector SN#    :                 *
* Detector ID      : GAM19                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.07     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701030           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4848E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  6-MAR-2007 21:45:12 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.242E+00	6.168E-01	1.321E-01	6.168E-01
CS-137	1.889E-01	3.442E-02	1.516E-02	3.442E-02
TL-208	2.018E-01	3.809E-02	1.483E-02	3.809E-02
BI-212	6.344E-01	2.247E-01	1.047E-01	2.247E-01
PB-212	6.760E-01	6.796E-02	2.170E-02	6.796E-02
BI-214	5.272E-01	8.549E-02	2.775E-02	8.549E-02
PB-214	6.323E-01	8.310E-02	2.761E-02	8.310E-02
RA-223	2.969E-01	1.315E-01	7.516E-02	1.315E-01
AC-228	6.964E-01	1.433E-01	5.238E-02	1.433E-01
PA-234M	1.797E+00	3.560E+00	1.562E+00	3.560E+00
TH-234	5.823E-01	3.973E-01	1.984E-01	3.973E-01
NP-237	2.684E-01	1.183E-01	8.715E-02	1.183E-01
AM-241	5.946E-02	6.378E-02	5.753E-02	6.378E-02
AM-243	9.821E-02	2.653E-02	2.049E-02	2.653E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-5.192E-03	1.852E-02	1.552E-02	1.852E-02	NOT IDENT.
RH-101	1.074E-02	1.886E-02	1.493E-02	1.886E-02	NOT IDENT.
SB-125	1.878E-02	4.330E-02	3.921E-02	4.330E-02	NOT IDENT.
EU-155	5.607E-02	4.963E-02	4.648E-02	4.963E-02	NOT IDENT.
PO-209	5.832E-01	3.503E+00	2.596E+00	3.503E+00	NOT IDENT.
BI-211	-2.832E-01	5.056E-01	4.066E-01	5.056E-01	NOT IDENT.
PA-233	-1.403E-02	3.050E-02	2.536E-02	3.050E-02	NOT IDENT.
U-235	-7.321E-03	1.023E-01	8.599E-02	1.023E-01	NOT IDENT.
NP-236	2.004E-02	3.209E-02	2.529E-02	3.209E-02	NOT IDENT.
NP-239	1.872E-02	1.106E-01	9.678E-02	1.106E-01	NOT IDENT.
CM-243	-4.568E-03	4.461E-02	4.026E-02	4.461E-02	NOT IDENT.
AM-246	5.604E-02	5.666E-02	5.327E-02	5.666E-02	NOT IDENT.
CF-249	1.053E-02	1.800E-02	1.650E-02	1.800E-02	NOT IDENT.

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
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ENERGY	MDA COUNTS
59.54	373.5410
63.29	419.0340
74.66	493.6347
74.81	493.7206
74.81	493.7206
77.11	495.0259
77.11	495.0259
86.48	435.2460
87.30	664.8990
87.30	664.8990
92.58	483.0302
98.44	363.3019
103.76	408.8844
105.31	376.4165
129.07	418.2184
143.76	408.1373
198.00	320.3257
209.25	312.7907
228.18	309.6426
238.63	244.0782
242.00	240.2559
269.46	248.2408
270.25	248.3452
277.36	249.2706
295.22	210.7219
300.09	198.1793
312.17	200.2368
338.32	186.4845
351.93	172.2200
387.59	144.5082
409.46	169.9519
427.87	132.8407
463.00	119.4554
510.77	118.6217
583.19	116.8888
609.31	113.5296
661.66	100.1432
727.33	79.3386
763.13	52.0142
768.36	105.9061
785.37	76.7297
794.95	83.9102
806.17	88.3579
831.80	88.9260
860.56	71.0726
896.60	50.1792
911.20	64.7373
934.06	41.5771
964.77	46.9620
968.97	47.0061
1001.03	51.8986
1078.86	39.1682
1120.29	53.6045
1155.19	54.9225
1173.23	57.9669
1238.11	54.8361
1280.96	35.8769
1332.51	32.2937
1377.67	26.6309
1401.50	20.3730
1407.98	36.6823
1460.80	32.0065
1509.23	29.3788
1588.20	40.8301
1620.50	21.5417
1729.60	14.5964
1764.49	23.3521

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701030

Total Uranium Activity	-3.3872E-03	ug/g
Total Uranium Counting Unc.	4.7346E-02	ug/g
Total Uranium Tpu	4.7346E-08	ug/g
Total Uranium Mda	3.9785E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 11:34:17.02

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701031.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 07:32:28
Sample ID        : G198701031           Sample quantity  : 1.42710E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:01.87  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	47.43*	12	433	0.74	94.84	90	10	8.03E-04	371.7	
2	0	63.39*	71	576	1.07	126.71	121	10	4.91E-03	68.4	
3	4	72.87*	39	448	1.65	145.64	142	16	2.70E-03	105.1	2.50E+00
4	4	74.97*	341	392	1.19	149.85	142	16	2.37E-02	11.8	
5	4	77.26*	558	336	1.26	154.42	142	16	3.87E-02	7.0	
6	2	84.35*	96	317	1.38	168.57	165	27	6.69E-03	34.0	2.84E+00
7	2	87.29*	240	412	1.36	174.46	165	27	1.67E-02	16.5	
8	2	89.96	180	300	1.03	179.80	165	27	1.25E-02	17.0	
9	2	92.73*	187	389	1.29	185.31	165	27	1.30E-02	23.9	
10	0	129.22	81	418	1.20	258.21	254	9	5.64E-03	46.8	
11	0	185.76*	121	438	1.15	371.16	367	10	8.40E-03	37.7	
12	0	209.61	84	456	1.12	418.82	413	12	5.87E-03	51.7	
13	4	238.67*	1184	244	1.27	476.88	469	20	8.22E-02	4.0	1.42E+00
14	4	241.63	280	316	1.80	482.79	469	20	1.94E-02	17.2	
15	0	270.04	106	239	2.53	539.55	535	10	7.35E-03	28.9	
16	0	277.98	146	243	1.19	555.42	550	11	1.01E-02	22.4	
17	0	295.34*	417	197	1.39	590.10	585	10	2.90E-02	8.4	
18	0	300.40	117	192	1.90	600.21	596	11	8.13E-03	25.0	
19	0	327.90	67	262	1.56	655.17	651	11	4.67E-03	48.0	
20	0	338.46	221	225	1.23	676.28	671	11	1.53E-02	14.9	
21	0	351.84*	664	181	1.40	703.01	696	13	4.61E-02	6.0	
22	0	376.38	34	159	0.75	752.06	747	10	2.36E-03	71.7	
23	0	383.29	31	157	2.72	765.87	761	11	2.15E-03	80.3	
24	0	463.18	60	135	0.95	925.53	922	10	4.15E-03	38.8	
25	0	497.70	27	64	0.68	994.53	992	7	1.84E-03	53.5	
26	0	511.29*	143	201	2.00	1021.69	1013	20	9.94E-03	31.1	
27	0	563.73*	5	57	0.92	1126.53	1123	7	3.75E-04	274.3	
28	0	571.96*	37	106	4.49	1142.98	1135	14	2.56E-03	64.5	
29	0	583.54*	341	139	1.39	1166.13	1158	16	2.37E-02	9.9	
30	0	609.56*	500	98	1.49	1218.15	1212	13	3.48E-02	6.5	
31	5	661.91	382	58	1.54	1322.82	1316	30	2.65E-02	6.2	1.94E+00
32	5	666.18	41	76	2.54	1331.36	1316	30	2.84E-03	58.9	
33	5	671.85	28	37	1.74	1342.68	1316	30	1.94E-03	44.6	
34	0	727.83*	93	45	2.37	1454.63	1449	12	6.45E-03	19.5	
35	0	756.55	22	52	0.78	1512.05	1507	10	1.55E-03	63.0	
36	0	768.80	31	62	0.66	1536.54	1533	9	2.17E-03	48.6	
37	0	816.81	64	69	10.32	1632.57	1620	25	4.44E-03	37.1	
38	0	861.46*	49	72	1.44	1721.87	1714	16	3.39E-03	42.8	

Sample ID : G198701031 Acquisition date : 14-DEC-2007 07:32:28

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	911.62*	244	66	1.21	1822.19	1816	13	1.69E-02	9.7	
40	3	965.49	57	31	2.28	1929.95	1922	26	3.93E-03	25.5	1.83E+00
41	3	969.52	153	16	1.67	1938.01	1922	26	1.06E-02	9.9	
42	0	1014.42	24	20	2.35	2027.83	2023	9	1.66E-03	39.6	
43	0	1047.65	18	29	1.13	2094.31	2088	10	1.25E-03	61.1	
44	0	1121.20*	74	61	2.41	2241.48	2235	15	5.11E-03	26.8	
45	0	1198.83	13	14	1.82	2396.83	2394	7	9.25E-04	52.3	
46	0	1206.52	38	22	4.33	2412.21	2405	13	2.62E-03	30.6	
47	0	1238.47	80	27	1.97	2476.16	2467	15	5.53E-03	18.0	
48	0	1261.72	25	45	6.98	2522.70	2511	18	1.74E-03	66.0	
49	5	1277.71	16	12	2.69	2554.70	2548	19	1.12E-03	63.0	1.36E+00
50	5	1282.05	14	16	1.66	2563.37	2548	19	9.78E-04	50.7	
51	0	1379.34	44	27	0.64	2758.12	2752	16	3.04E-03	30.9	
52	0	1400.70	47	42	14.03	2800.88	2780	33	3.27E-03	44.0	
53	0	1408.77	26	6	1.44	2817.05	2813	9	1.77E-03	26.9	
54	0	1461.57*	406	23	1.84	2922.75	2915	15	2.82E-02	5.8	
55	0	1490.96	13	15	3.86	2981.59	2975	12	9.26E-04	64.1	
56	0	1498.15	12	18	3.21	2995.98	2990	11	8.61E-04	76.7	
57	0	1562.52	11	14	1.43	3124.86	3121	9	7.46E-04	69.3	
58	1	1589.16	15	30	2.14	3178.22	3174	18	1.05E-03	65.9	4.47E+00
59	1	1593.60	19	21	2.14	3187.11	3174	18	1.35E-03	47.5	
60	0	1683.11	6	5	0.53	3366.37	3363	7	4.29E-04	72.7	
61	0	1706.79	7	4	0.74	3413.79	3409	7	5.18E-04	55.5	
62	0	1717.07	13	15	2.98	3434.39	3422	15	9.03E-04	70.6	
63	0	1730.73	21	12	1.02	3461.74	3457	9	1.46E-03	37.9	
64	0	1765.21*	72	16	1.60	3530.81	3524	13	4.98E-03	18.2	
65	0	1824.33	7	7	2.33	3649.24	3642	10	5.03E-04	78.9	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701031       *
* Acquisition date : 14-DEC-2007 07:32:28 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:01.87     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701031           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4271E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.894E+00	5.469E-01	2.619E-01	0.000E+00
CS-137	2.297E-01	3.183E-02	2.324E-02	0.000E+00
TL-208	1.850E-01	3.765E-02	2.256E-02	0.000E+00
BI-212	4.355E-01	1.698E-01	1.718E-01	0.000E+00
PB-212	6.435E-01	6.199E-02	4.339E-02	0.000E+00
BI-214	5.157E-01	7.305E-02	5.000E-02	0.000E+00
PB-214	5.455E-01	7.093E-02	4.890E-02	0.000E+00
RA-223	1.977E-01	1.128E-01	1.292E-01	0.000E+00
AC-228	6.409E-01	1.351E-01	8.462E-02	0.000E+00
TH-234	6.090E-01	2.929E-01	3.189E-01	0.000E+00
NP-237	3.539E-01	1.214E-01	1.444E-01	0.000E+00
AM-243	1.054E-01	2.677E-02	3.090E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	4.701E-03		1.612E-02	2.765E-02	0.000E+00	NOT IDENT.
RH-101	-1.452E-02		1.624E-02	2.656E-02	0.000E+00	NOT IDENT.
SB-125	-3.865E-02		4.258E-02	6.802E-02	0.000E+00	NOT IDENT.
EU-155	6.402E-03		4.142E-02	7.660E-02	0.000E+00	NOT IDENT.
PO-209	4.929E-02		3.205E+00	5.455E+00	0.000E+00	NOT IDENT.
BI-211	-2.629E-01		4.267E-01	6.895E-01	0.000E+00	NOT IDENT.
PA-233	1.326E-02		2.903E-02	5.143E-02	0.000E+00	NOT IDENT.
PA-234M	-9.689E-02		1.984E+00	3.147E+00	0.000E+00	NOT IDENT.
U-235	-1.932E-02		9.541E-02	1.617E-01	0.000E+00	NOT IDENT.
NP-236	1.944E-02		2.896E-02	4.449E-02	0.000E+00	NOT IDENT.
NP-239	2.145E-02		9.798E-02	1.746E-01	0.000E+00	NOT IDENT.
AM-241	9.750E-03		5.154E-02	8.146E-02	0.000E+00	NOT IDENT.
CM-243	-1.601E-02		3.696E-02	6.699E-02	0.000E+00	NOT IDENT.
AM-246	4.028E-02		5.420E-02	9.751E-02	0.000E+00	NOT IDENT.
CF-249	9.525E-03		2.005E-02	3.109E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 11:34:18.11

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701031.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 07:32:28
Sample ID        : G198701031           Sample quantity  : 1.42710E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:01.87  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	406	10.66*	1.286E+00	3.894E+00	3.894E+00	14.33
CS-137	661.66	382	85.10*	2.582E+00	2.285E-01	2.297E-01	14.14
TL-208	277.36	146	6.31	5.037E+00	6.033E-01	6.033E-01	45.13
	510.77	143	22.60	3.198E+00	2.604E-01	2.604E-01	62.40
	583.19	341	84.50*	2.872E+00	1.850E-01	1.850E-01	20.76
	763.13	------	1.81	2.279E+00	------	Line Not Found	------
	860.56	49	12.42	2.044E+00	2.526E-01	2.526E-01	85.98
BI-212	727.33	93	11.80*	2.377E+00	4.355E-01	4.355E-01	39.79
	785.37	------	1.10	2.222E+00	------	Line Not Found	------
	1620.50	------	1.49	1.195E+00	------	Line Not Found	------
PB-212	74.81	341	10.40	6.243E+00	6.909E-01	6.909E-01	25.93
	77.11	558	17.50	6.468E+00	6.480E-01	6.480E-01	17.78
	87.30	240	7.81	7.199E+00	5.619E-01	5.619E-01	34.99
	238.63	1184	43.30*	5.589E+00	6.435E-01	6.435E-01	9.83
	300.09	117	3.28	4.770E+00	9.838E-01	9.838E-01	50.30
BI-214	609.31	500	46.10*	2.769E+00	5.156E-01	5.157E-01	14.45
	768.36	31	4.94	2.264E+00	3.669E-01	3.670E-01	97.45
	806.17	------	1.22	2.170E+00	------	Line Not Found	------
	934.06	------	3.03	1.899E+00	------	Line Not Found	------
	1120.29	74	15.10	1.608E+00	3.986E-01	3.987E-01	53.93
	1155.19	------	1.63	1.566E+00	------	Line Not Found	------
	1238.11	80	5.79	1.473E+00	1.228E+00	1.228E+00	36.63
	1280.96	14	1.43	1.430E+00	9.057E-01	9.058E-01	101.73
	1377.67	44	4.00	1.346E+00	1.070E+00	1.070E+00	62.38
	1401.50	47	1.27	1.329E+00	3.672E+00	3.673E+00	88.34
	1407.98	26	2.15	1.323E+00	1.181E+00	1.181E+00	54.46
	1509.23	------	2.11	1.256E+00	------	Line Not Found	------
	1729.60	21	2.92	1.148E+00	8.230E-01	8.230E-01	76.19
	1764.49	72	15.40	1.136E+00	5.393E-01	5.394E-01	36.93
PB-214	74.81	341	6.44	6.243E+00	1.116E+00	1.116E+00	25.93
	77.11	558	10.80	6.468E+00	1.050E+00	1.050E+00	17.78
	87.30	240	4.84	7.199E+00	9.067E-01	9.068E-01	34.99

Sample ID : G198701031 Acquisition date : 14-DEC-2007 07:32:28

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	280	7.43	5.544E+00	8.937E-01	8.938E-01	34.95
	295.22	417	19.30	4.827E+00	5.887E-01	5.887E-01	17.95
	351.93	664	37.60*	4.256E+00	5.454E-01	5.455E-01	13.27
RA-223	269.46	106	13.70*	5.140E+00	1.977E-01	1.977E-01	58.21
AC-228	129.07	81	2.42	7.642E+00	5.777E-01	5.777E-01	93.77
	209.25	84	3.89	6.079E+00	4.698E-01	4.698E-01	103.56
	270.25	106	3.46	5.140E+00	7.829E-01	7.829E-01	58.21
	338.32	221	11.27	4.378E+00	5.880E-01	5.880E-01	30.25
	409.46	------	1.92	3.801E+00	------ Line Not Found		------
	463.00	60	4.40	3.458E+00	5.168E-01	5.168E-01	77.83
	794.95	------	4.25	2.198E+00	------ Line Not Found		------
	911.20	244	25.80*	1.941E+00	6.409E-01	6.409E-01	21.51
	964.77	57	4.99	1.842E+00	8.103E-01	8.103E-01	51.65
	968.97	153	15.80	1.835E+00	6.933E-01	6.933E-01	21.55
	1588.20	15	3.22	1.211E+00	5.084E-01	5.084E-01	132.08
TH-234	63.29	71	4.80	4.743E+00	4.084E-01	4.084E-01	137.26
	92.58	187	5.41*	7.448E+00	6.090E-01	6.090E-01	49.07
NP-237	86.48	240	12.40*	7.199E+00	3.539E-01	3.539E-01	34.99
AM-243	74.66	341	68.20*	6.243E+00	1.054E-01	1.054E-01	25.93

Flag: "*" = Keyline

Sample ID : G198701031 Acquisition date : 14-DEC-2007 07:32:28

Total number of lines in spectrum 65
Number of unidentified lines 29
Number of lines tentatively identified by NID 36 55.38%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.894E+00	3.894E+00	0.558E+00	14.33	
CS-137	9.47E+08S	1.00	2.285E-01	2.297E-01	0.325E-01	14.14	
TL-208	4.43E+17S	1.00	1.850E-01	1.850E-01	0.384E-01	20.76	
BI-212	4.43E+17S	1.00	4.355E-01	4.355E-01	1.733E-01	39.79	
PB-212	4.43E+17S	1.00	6.435E-01	6.435E-01	0.633E-01	9.83	
BI-214	5.05E+10S	1.00	5.156E-01	5.157E-01	0.745E-01	14.45	
PB-214	5.05E+10S	1.00	5.454E-01	5.455E-01	0.724E-01	13.27	
RA-223	1.04E+12S	1.00	1.977E-01	1.977E-01	1.151E-01	58.21	
AC-228	4.43E+17S	1.00	6.409E-01	6.409E-01	1.379E-01	21.51	
TH-234	1.41E+17S	1.00	6.090E-01	6.090E-01	2.989E-01	49.07	
NP-237	6.75E+13S	1.00	3.539E-01	3.539E-01	1.238E-01	34.99	
AM-243	2.33E+11S	1.00	1.054E-01	1.054E-01	0.273E-01	25.93	
			---	---			
		Total Activity :	8.355E+00	8.356E+00			
		Grand Total Activity :	8.355E+00	8.356E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701031 Acquisition date : 14-DEC-2007 07:32:28

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	47.43	12	433	0.74	94.84	90	10	8.03E-04	****	1.97E+00	
4	72.87	39	448	1.65	145.64	142	16	2.70E-03	****	6.02E+00	
2	84.35	96	317	1.38	168.57	165	27	6.69E-03	68.0	7.02E+00	
2	89.96	180	300	1.03	179.80	165	27	1.25E-02	34.1	7.33E+00	
0	185.76	121	438	1.15	371.16	367	10	8.40E-03	75.3	6.54E+00	
0	327.90	67	262	1.56	655.17	651	11	4.67E-03	96.0	4.48E+00	
0	376.38	34	159	0.75	752.06	747	10	2.36E-03	****	4.05E+00	
0	383.29	31	157	2.72	765.87	761	11	2.15E-03	****	3.99E+00	
0	497.70	27	64	0.68	994.53	992	7	1.84E-03	****	3.27E+00	
0	563.73	5	57	0.92	1126.53	1123	7	3.75E-04	****	2.95E+00	
0	571.96	37	106	4.49	1142.98	1135	14	2.56E-03	****	2.92E+00	
5	666.18	41	76	2.54	1331.36	1316	30	2.84E-03	****	2.57E+00	
5	671.85	28	37	1.74	1342.68	1316	30	1.94E-03	89.3	2.55E+00	
0	756.55	22	52	0.78	1512.05	1507	10	1.55E-03	****	2.30E+00	
0	816.81	64	69	10.32	1632.57	1620	25	4.44E-03	74.1	2.14E+00	
0	1014.42	24	20	2.35	2027.83	2023	9	1.66E-03	79.2	1.76E+00	
0	1047.65	18	29	1.13	2094.31	2088	10	1.25E-03	****	1.71E+00	
0	1198.83	13	14	1.82	2396.83	2394	7	9.25E-04	****	1.52E+00	
0	1206.52	38	22	4.33	2412.21	2405	13	2.62E-03	61.3	1.51E+00	
0	1261.72	25	45	6.98	2522.70	2511	18	1.74E-03	****	1.45E+00	
5	1277.71	16	12	2.69	2554.70	2548	19	1.12E-03	****	1.43E+00	
0	1490.96	13	15	3.86	2981.59	2975	12	9.26E-04	****	1.27E+00	
0	1498.15	12	18	3.21	2995.98	2990	11	8.61E-04	****	1.26E+00	
0	1562.52	11	14	1.43	3124.86	3121	9	7.46E-04	****	1.22E+00	
1	1593.60	19	21	2.14	3187.11	3174	18	1.35E-03	95.0	1.21E+00	
0	1683.11	6	5	0.53	3366.37	3363	7	4.29E-04	****	1.17E+00	
0	1706.79	7	4	0.74	3413.79	3409	7	5.18E-04	****	1.16E+00	
0	1717.07	13	15	2.98	3434.39	3422	15	9.03E-04	****	1.15E+00	
0	1824.33	7	7	2.33	3649.24	3642	10	5.03E-04	****	1.12E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701031            *
* Acquisition date : 14-DEC-2007 07:32:28 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:01.87     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701031           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.4271E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.894E+00	5.469E-01	1.310E-01	5.469E-01
CS-137	2.297E-01	3.183E-02	1.163E-02	3.183E-02
TL-208	1.850E-01	3.765E-02	1.128E-02	3.765E-02
BI-212	4.355E-01	1.698E-01	8.596E-02	1.698E-01
PB-212	6.435E-01	6.199E-02	2.171E-02	6.199E-02
BI-214	5.157E-01	7.305E-02	2.502E-02	7.305E-02
PB-214	5.455E-01	7.093E-02	2.446E-02	7.093E-02
RA-223	1.977E-01	1.128E-01	6.464E-02	1.128E-01
AC-228	6.409E-01	1.351E-01	4.233E-02	1.351E-01
TH-234	6.090E-01	2.929E-01	1.595E-01	2.929E-01
NP-237	3.539E-01	1.214E-01	7.226E-02	1.214E-01
AM-243	1.054E-01	2.677E-02	1.546E-02	2.677E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	4.701E-03	1.612E-02	1.383E-02	1.612E-02	NOT IDENT.
RH-101	-1.452E-02	1.624E-02	1.329E-02	1.624E-02	NOT IDENT.
SB-125	-3.865E-02	4.258E-02	3.403E-02	4.258E-02	NOT IDENT.
EU-155	6.402E-03	4.142E-02	3.832E-02	4.142E-02	NOT IDENT.
PO-209	4.929E-02	3.205E+00	2.729E+00	3.205E+00	NOT IDENT.
BI-211	-2.629E-01	4.267E-01	3.449E-01	4.267E-01	NOT IDENT.
PA-233	1.326E-02	2.903E-02	2.573E-02	2.903E-02	NOT IDENT.
PA-234M	-9.689E-02	1.984E+00	1.575E+00	1.984E+00	NOT IDENT.
U-235	-1.932E-02	9.541E-02	8.089E-02	9.541E-02	NOT IDENT.
NP-236	1.944E-02	2.896E-02	2.226E-02	2.896E-02	NOT IDENT.
NP-239	2.145E-02	9.798E-02	8.737E-02	9.798E-02	NOT IDENT.
AM-241	9.750E-03	5.154E-02	4.075E-02	5.154E-02	NOT IDENT.
CM-243	-1.601E-02	3.696E-02	3.351E-02	3.696E-02	NOT IDENT.
AM-246	4.028E-02	5.420E-02	4.878E-02	5.420E-02	NOT IDENT.
CF-249	9.525E-03	2.005E-02	1.555E-02	2.005E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	324.3334
63.29	404.9372
74.66	400.1884
74.81	400.2688
74.81	400.2688
77.11	427.5033
77.11	427.5033
86.48	385.6899
87.30	386.0773
87.30	386.0773
92.58	388.5250
98.44	329.0629
103.76	352.9125
105.31	344.7385
129.07	358.5801
143.76	360.7603
198.00	341.6707
209.25	311.8199
228.18	276.0394
238.63	270.1124
242.00	270.6978
269.46	204.3094
270.25	206.5989
277.36	203.4615
295.22	200.9006
300.09	186.8273
312.17	192.1567
338.32	165.8081
351.93	152.3470
387.59	146.0803
409.46	170.5024
427.87	155.6851
463.00	114.1324
510.77	127.5229
583.19	76.2887
609.31	103.8816
661.66	66.0642
727.33	59.7234
763.13	73.9905
768.36	85.8021
785.37	66.6271
794.95	66.8080
806.17	50.5105
831.80	73.4508
860.56	44.0140
896.60	65.6395
911.20	46.6278
934.06	38.7422
964.77	45.2031
968.97	45.2493
1001.03	41.4561
1078.86	39.0451
1120.29	40.8265
1155.19	31.1212
1173.23	39.8599
1238.11	44.7697
1280.96	31.4676
1332.51	25.9595
1377.67	24.0454
1401.50	17.7123
1407.98	22.5703
1460.80	34.1821
1509.23	28.7317
1588.20	24.9630
1620.50	20.4976
1729.60	19.8690
1764.49	20.5488

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701031

Total Uranium Activity	-8.9377E-03	ug/g
Total Uranium Counting Unc.	4.4145E-02	ug/g
Total Uranium Tpu	4.4145E-08	ug/g
Total Uranium Mda	3.7428E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:11:50.75

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701032.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:11:22
Sample ID        : G198701032           Sample quantity  : 1.33700E+02 GRAM
Detector name    : GAM06                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.55  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	45.59*	30	261	1.10	91.25	89	6	2.05E-03	97.0	
2	0	62.67*	76	395	1.06	125.38	122	8	5.26E-03	50.5	
3	3	74.49*	213	403	1.18	149.00	145	15	1.48E-02	17.7	1.10E+00
4	3	76.72*	389	345	0.99	153.46	145	15	2.70E-02	9.6	
5	0	83.40*	104	357	1.30	166.80	164	7	7.22E-03	33.1	
6	0	86.22*	70	449	0.95	172.43	171	7	4.88E-03	53.1	
7	4	89.42	111	221	1.03	178.82	177	14	7.70E-03	20.7	1.55E+00
8	4	92.47*	247	448	1.47	184.93	177	14	1.71E-02	18.7	
9	0	104.75	51	329	1.51	209.46	207	7	3.52E-03	61.0	
10	0	129.11*	76	412	0.96	258.14	253	10	5.26E-03	53.1	
11	0	153.40	70	292	0.59	306.66	304	7	4.87E-03	42.0	
12	0	185.61*	208	408	1.14	371.02	367	11	1.44E-02	21.6	
13	0	209.28	137	462	1.45	418.32	412	13	9.54E-03	33.4	
14	4	236.12	69	157	1.66	471.95	469	19	4.77E-03	31.9	1.47E+00
15	4	238.29*	1024	188	1.09	476.30	469	19	7.11E-02	4.1	
16	4	241.21	271	305	1.79	482.13	469	19	1.88E-02	15.8	
17	0	270.27	128	270	1.23	540.21	535	11	8.87E-03	26.4	
18	0	294.79*	310	253	1.17	589.20	583	11	2.15E-02	12.2	
19	0	299.76	61	141	1.47	599.14	597	7	4.22E-03	34.5	
20	0	312.77	22	164	0.91	625.14	623	8	1.53E-03	103.1	
21	0	328.34	98	193	3.08	656.23	651	11	6.81E-03	29.2	
22	0	337.74*	157	233	1.24	675.03	671	11	1.09E-02	21.2	
23	0	351.68*	515	272	1.27	702.89	697	13	3.58E-02	8.3	
24	0	359.04	30	161	3.69	717.60	711	10	2.09E-03	82.0	
25	0	363.22	28	147	1.42	725.94	722	9	1.95E-03	80.0	
26	0	453.86*	25	99	1.11	907.10	903	8	1.74E-03	77.3	
27	0	462.56	45	124	1.51	924.49	921	10	3.11E-03	49.0	
28	0	505.78	34	56	0.97	1010.86	1008	6	2.35E-03	39.5	
29	0	510.66*	121	136	2.06	1020.62	1014	17	8.40E-03	30.7	
30	0	550.84	41	123	7.18	1100.92	1091	17	2.88E-03	63.2	
31	0	563.67	85	295	15.44	1126.56	1108	38	5.89E-03	66.5	
32	0	582.72*	281	120	1.48	1164.64	1160	11	1.95E-02	10.0	
33	0	597.88	17	54	0.83	1194.94	1191	6	1.15E-03	75.7	
34	0	608.85*	324	156	1.35	1216.88	1210	15	2.25E-02	10.7	
35	0	661.28	320	97	1.63	1321.67	1316	12	2.22E-02	8.3	
36	0	727.09	104	51	1.78	1453.23	1449	12	7.24E-03	16.6	
37	0	759.43	14	55	3.38	1517.87	1509	10	9.89E-04	102.4	
38	0	768.53	18	81	1.53	1536.06	1531	9	1.27E-03	92.4	

Sample ID : G198701032 Acquisition date : 14-DEC-2007 08:11:22

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	785.58	31	45	1.02	1570.15	1568	9	2.17E-03	43.3	
40	0	794.79	31	51	1.46	1588.57	1584	10	2.15E-03	46.6	
41	0	831.75	8	51	0.91	1662.45	1654	10	5.86E-04	160.7	
42	0	856.37	30	37	0.55	1711.66	1706	10	2.05E-03	42.9	
43	0	860.39	40	34	1.30	1719.70	1716	9	2.77E-03	30.7	
44	0	910.78*	195	42	1.45	1820.46	1815	13	1.35E-02	10.5	
45	0	934.26	28	54	1.54	1867.40	1861	15	1.96E-03	60.6	
46	0	964.54	25	53	0.54	1927.93	1924	8	1.75E-03	53.6	
47	0	968.89*	113	68	1.99	1936.62	1931	14	7.84E-03	19.3	
48	0	1003.21*	38	43	6.33	2005.24	1996	20	2.67E-03	48.6	
49	0	1051.43	45	30	5.15	2101.65	2093	16	3.10E-03	31.9	
50	0	1119.71*	78	45	2.74	2238.18	2229	15	5.44E-03	23.3	
51	0	1206.23	29	22	1.58	2411.21	2405	11	2.01E-03	36.4	
52	0	1238.92	25	46	2.02	2476.58	2470	12	1.77E-03	58.8	
53	0	1319.49	7	26	4.49	2637.69	2626	15	4.97E-04	160.3	
54	0	1348.73	11	27	3.79	2696.17	2686	13	7.77E-04	103.1	
55	0	1353.02	11	17	1.71	2704.75	2698	12	7.59E-04	82.9	
56	0	1370.08	7	8	1.45	2738.88	2732	10	4.77E-04	92.1	
57	0	1377.41	42	20	1.18	2753.53	2745	16	2.92E-03	28.4	
58	0	1437.85	8	19	2.26	2874.41	2868	11	5.81E-04	106.8	
59	0	1460.33*	364	41	1.98	2919.38	2911	14	2.53E-02	6.8	
60	0	1473.94	5	5	0.64	2946.60	2938	10	3.47E-04	94.9	
61	0	1484.04	29	21	3.81	2966.79	2957	21	2.01E-03	43.7	
62	0	1509.80	15	20	0.71	3018.33	3007	16	1.04E-03	71.5	
63	0	1528.43	18	14	4.29	3055.58	3047	14	1.27E-03	49.1	
64	0	1566.59	7	7	0.99	3131.91	3126	10	4.81E-04	82.6	
65	0	1588.36	28	14	2.28	3175.46	3166	14	1.91E-03	34.6	
66	0	1729.62	30	4	1.55	3458.04	3450	17	2.10E-03	23.9	
67	0	1764.59*	34	10	1.56	3528.00	3521	14	2.35E-03	32.7	
68	0	1847.68	10	11	1.29	3694.22	3690	10	6.98E-04	67.5	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701032       *
* Acquisition date : 14-DEC-2007 08:11:22 Detector SN#    :                 *
* Detector ID      : GAM06                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.55     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701032           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3370E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 20-FEB-2007 10:58:43 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.989E+00	7.306E-01	3.068E-01	0.000E+00
CS-137	2.682E-01	4.708E-02	3.729E-02	0.000E+00
EU-155	5.830E-02	6.984E-02	1.040E-01	0.000E+00
TL-208	2.120E-01	4.373E-02	3.558E-02	0.000E+00
BI-211	2.232E-01	7.033E-01	1.142E+00	0.000E+00
BI-212	6.822E-01	2.275E-01	2.695E-01	0.000E+00
PB-212	7.547E-01	7.650E-02	5.410E-02	0.000E+00
BI-214	4.648E-01	1.019E-01	6.744E-02	0.000E+00
PB-214	5.843E-01	1.012E-01	7.541E-02	0.000E+00
RA-223	3.262E-01	1.701E-01	1.800E-01	0.000E+00
AC-228	7.181E-01	1.636E-01	1.196E-01	0.000E+00
PA-233	2.224E-02	4.494E-02	6.673E-02	0.000E+00
TH-234	1.162E+00	4.355E-01	3.954E-01	0.000E+00
NP-237	1.544E-01	1.612E-01	1.990E-01	0.000E+00
AM-243	1.063E-01	3.795E-02	4.713E-02	0.000E+00
CM-243	5.245E-02	6.283E-02	8.639E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	9.790E-04	2.444E-02	4.022E-02	0.000E+00	NOT IDENT.
RH-101	2.360E-02	1.910E-02	3.574E-02	0.000E+00	NOT IDENT.
SB-125	2.498E-02	5.331E-02	9.301E-02	0.000E+00	NOT IDENT.
PO-209	-1.427E+00	4.022E+00	6.478E+00	0.000E+00	NOT IDENT.
PA-234M	1.652E+00	3.056E+00	4.357E+00	0.000E+00	NOT IDENT.
U-235	1.339E-01	1.100E-01	1.972E-01	0.000E+00	NOT IDENT.
NP-236	2.894E-02	3.296E-02	5.779E-02	0.000E+00	NOT IDENT.
NP-239	-3.936E-03	1.254E-01	2.230E-01	0.000E+00	NOT IDENT.
AM-241	1.117E-02	8.850E-02	1.447E-01	0.000E+00	NOT IDENT.
AM-246	4.093E-02	7.067E-02	1.283E-01	0.000E+00	NOT IDENT.
CF-249	1.725E-02	2.324E-02	4.136E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:11:51.74

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701032.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:11:22
Sample ID        : G198701032           Sample quantity  : 1.33700E+02 GRAM
Detector name    : GAM06                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.55  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	364	10.66*	9.604E-01	4.989E+00	4.989E+00	14.94
CS-137	661.66	320	85.10*	1.977E+00	2.669E-01	2.682E-01	17.92
EU-155	105.31	51	21.20*	5.937E+00	5.661E-02	5.830E-02	122.23
TL-208	277.36	------	6.31	3.937E+00	------	Line Not Found	------
	510.77	121	22.60	2.457E+00	3.057E-01	3.057E-01	61.71
	583.19	281	84.50*	2.203E+00	2.120E-01	2.120E-01	21.05
	763.13	------	1.81	1.741E+00	------	Line Not Found	------
	860.56	40	12.42	1.559E+00	2.896E-01	2.896E-01	62.06
BI-211	831.80	8	3.30*	1.609E+00	2.232E-01	2.232E-01	321.54
BI-212	727.33	104	11.80*	1.818E+00	6.822E-01	6.822E-01	34.04
	785.37	31	1.10	1.695E+00	2.350E+00	2.350E+00	86.92
	1620.50	------	1.49	8.878E-01	------	Line Not Found	------
PB-212	74.81	213	10.40	4.128E+00	6.969E-01	6.969E-01	36.43
	77.11	389	17.50	4.357E+00	7.162E-01	7.162E-01	20.97
	87.30	70	7.81	5.147E+00	2.452E-01	2.452E-01	106.53
	238.63	1024	43.30*	4.398E+00	7.547E-01	7.547E-01	10.34
	300.09	61	3.28	3.715E+00	7.008E-01	7.008E-01	69.33
BI-214	609.31	324	46.10*	2.123E+00	4.647E-01	4.648E-01	22.38
	768.36	18	4.94	1.730E+00	3.009E-01	3.009E-01	184.98
	806.17	------	1.22	1.656E+00	------	Line Not Found	------
	934.06	28	3.03	1.443E+00	9.062E-01	9.063E-01	121.67
	1120.29	78	15.10	1.216E+00	5.984E-01	5.985E-01	47.19
	1155.19	------	1.63	1.181E+00	------	Line Not Found	------
	1238.11	25	5.79	1.107E+00	5.572E-01	5.572E-01	117.79
	1280.96	------	1.43	1.075E+00	------	Line Not Found	------
	1377.67	42	4.00	1.008E+00	1.462E+00	1.463E+00	57.08
	1401.50	------	1.27	9.936E-01	------	Line Not Found	------
	1407.98	------	2.15	9.898E-01	------	Line Not Found	------
	1509.23	15	2.11	9.354E-01	1.067E+00	1.067E+00	143.13
	1729.60	30	2.92	8.509E-01	1.707E+00	1.708E+00	48.14
	1764.49	34	15.40	8.410E-01	3.661E-01	3.662E-01	65.58
PB-214	74.81	213	6.44	4.128E+00	1.125E+00	1.126E+00	36.43

Sample ID : G198701032 Acquisition date : 14-DEC-2007 08:11:22

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	77.11	389	10.80	4.357E+00	1.160E+00	1.161E+00	20.97
	87.30	70	4.84	5.147E+00	3.956E-01	3.956E-01	106.53
	242.00	271	7.43	4.359E+00	1.174E+00	1.175E+00	32.16
	295.22	310	19.30	3.762E+00	5.986E-01	5.987E-01	25.28
	351.93	515	37.60*	3.292E+00	5.843E-01	5.843E-01	17.66
RA-223	269.46	128	13.70*	4.013E+00	3.262E-01	3.262E-01	53.22
AC-228	129.07	76	2.42	6.051E+00	7.255E-01	7.255E-01	106.39
	209.25	137	3.89	4.813E+00	1.030E+00	1.030E+00	67.15
	270.25	128	3.46	4.013E+00	1.292E+00	1.292E+00	53.22
	338.32	157	11.27	3.395E+00	5.750E-01	5.750E-01	42.82
	409.46	------	1.92	2.927E+00	------	Line Not Found	------
	463.00	45	4.40	2.660E+00	5.376E-01	5.376E-01	98.12
	794.95	31	4.25	1.677E+00	6.085E-01	6.085E-01	93.51
	911.20	195	25.80*	1.478E+00	7.181E-01	7.181E-01	23.25
	964.77	25	4.99	1.400E+00	5.059E-01	5.059E-01	107.59
	968.97	113	15.80	1.394E+00	7.196E-01	7.196E-01	39.67
	1588.20	28	3.22	9.005E-01	1.335E+00	1.335E+00	69.48
PA-233	312.17	22	38.60*	3.598E+00	2.224E-02	2.224E-02	206.20
TH-234	63.29	76	4.80	2.682E+00	8.256E-01	8.256E-01	101.38
	92.58	247	5.41*	5.513E+00	1.162E+00	1.162E+00	38.24
NP-237	86.48	70	12.40*	5.147E+00	1.544E-01	1.544E-01	106.53
AM-243	74.66	213	68.20*	4.128E+00	1.063E-01	1.063E-01	36.43
CM-243	103.76	51	23.00*	5.937E+00	5.218E-02	5.245E-02	122.23

Flag: "*" = Keyline

Sample ID : G198701032 Acquisition date : 14-DEC-2007 08:11:22

Total number of lines in spectrum 68
Number of unidentified lines 29
Number of lines tentatively identified by NID 39 57.35%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.989E+00	4.989E+00	0.746E+00	14.94	
CS-137	9.47E+08S	1.00	2.669E-01	2.682E-01	0.480E-01	17.92	
EU-155	1.57E+08S	1.03	5.661E-02	5.830E-02	7.127E-02	122.23	
TL-208	4.43E+17S	1.00	2.120E-01	2.120E-01	0.446E-01	21.05	
BI-211	2.22E+16S	1.00	2.232E-01	2.232E-01	7.177E-01	321.54	
BI-212	4.43E+17S	1.00	6.822E-01	6.822E-01	2.322E-01	34.04	
PB-212	4.43E+17S	1.00	7.547E-01	7.547E-01	0.781E-01	10.34	
BI-214	5.05E+10S	1.00	4.647E-01	4.648E-01	1.040E-01	22.38	
PB-214	5.05E+10S	1.00	5.843E-01	5.843E-01	1.032E-01	17.66	
RA-223	1.04E+12S	1.00	3.262E-01	3.262E-01	1.736E-01	53.22	
AC-228	4.43E+17S	1.00	7.181E-01	7.181E-01	1.669E-01	23.25	
PA-233	6.75E+13S	1.00	2.224E-02	2.224E-02	4.585E-02	206.20	
TH-234	1.41E+17S	1.00	1.162E+00	1.162E+00	0.444E+00	38.24	
NP-237	6.75E+13S	1.00	1.544E-01	1.544E-01	1.645E-01	106.53	
AM-243	2.33E+11S	1.00	1.063E-01	1.063E-01	0.387E-01	36.43	
CM-243	8.99E+08S	1.01	5.218E-02	5.245E-02	6.411E-02	122.23	
		Total Activity :	1.077E+01	1.078E+01			

Grand Total Activity : 1.077E+01 1.078E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701032 Acquisition date : 14-DEC-2007 08:11:22

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	45.59	30	261	1.10	91.25	89	6	2.05E-03	****	6.15E-01	
0	83.40	104	357	1.30	166.80	164	7	7.22E-03	66.2	4.94E+00	
4	89.42	111	221	1.03	178.82	177	14	7.70E-03	41.4	5.35E+00	
0	153.40	70	292	0.59	306.66	304	7	4.87E-03	84.1	5.74E+00	
0	185.61	208	408	1.14	371.02	367	11	1.44E-02	43.2	5.20E+00	
4	236.12	69	157	1.66	471.95	469	19	4.77E-03	63.7	4.43E+00	
0	328.34	98	193	3.08	656.23	651	11	6.81E-03	58.4	3.47E+00	
0	359.04	30	161	3.69	717.60	711	10	2.09E-03	****	3.24E+00	
0	363.22	28	147	1.42	725.94	722	9	1.95E-03	****	3.21E+00	
0	453.86	25	99	1.11	907.10	903	8	1.74E-03	****	2.70E+00	
0	505.78	34	56	0.97	1010.86	1008	6	2.35E-03	78.9	2.48E+00	
0	550.84	41	123	7.18	1100.92	1091	17	2.88E-03	****	2.31E+00	
0	563.67	85	295	15.44	1126.56	1108	38	5.89E-03	****	2.27E+00	
0	597.88	17	54	0.83	1194.94	1191	6	1.15E-03	****	2.16E+00	
0	759.43	14	55	3.38	1517.87	1509	10	9.89E-04	****	1.75E+00	
0	856.37	30	37	0.55	1711.66	1706	10	2.05E-03	85.7	1.57E+00	
0	1003.21	38	43	6.33	2005.24	1996	20	2.67E-03	97.2	1.35E+00	
0	1051.43	45	30	5.15	2101.65	2093	16	3.10E-03	63.8	1.29E+00	
0	1206.23	29	22	1.58	2411.21	2405	11	2.01E-03	72.8	1.13E+00	
0	1319.49	7	26	4.49	2637.69	2626	15	4.97E-04	****	1.05E+00	
0	1348.73	11	27	3.79	2696.17	2686	13	7.77E-04	****	1.03E+00	
0	1353.02	11	17	1.71	2704.75	2698	12	7.59E-04	****	1.02E+00	
0	1370.08	7	8	1.45	2738.88	2732	10	4.77E-04	****	1.01E+00	
0	1437.85	8	19	2.26	2874.41	2868	11	5.81E-04	****	9.73E-01	
0	1473.94	5	5	0.64	2946.60	2938	10	3.47E-04	****	9.53E-01	
0	1484.04	29	21	3.81	2966.79	2957	21	2.01E-03	87.3	9.48E-01	
0	1528.43	18	14	4.29	3055.58	3047	14	1.27E-03	98.3	9.27E-01	
0	1566.59	7	7	0.99	3131.91	3126	10	4.81E-04	****	9.10E-01	
0	1847.68	10	11	1.29	3694.22	3690	10	6.98E-04	****	8.21E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701032            *
* Acquisition date : 14-DEC-2007 08:11:22 Detector SN#    :                 *
* Detector ID      : GAM06                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.55     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701032           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3370E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 20-FEB-2007 10:58:43 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.989E+00	7.306E-01	1.535E-01	7.306E-01
CS-137	2.682E-01	4.708E-02	1.865E-02	4.708E-02
EU-155	5.830E-02	6.984E-02	5.205E-02	6.984E-02
TL-208	2.120E-01	4.373E-02	1.780E-02	4.373E-02
BI-211	2.232E-01	7.033E-01	5.715E-01	7.033E-01
BI-212	6.822E-01	2.275E-01	1.348E-01	2.275E-01
PB-212	7.547E-01	7.650E-02	2.707E-02	7.650E-02
BI-214	4.648E-01	1.019E-01	3.374E-02	1.019E-01
PB-214	5.843E-01	1.012E-01	3.773E-02	1.012E-01
RA-223	3.262E-01	1.701E-01	9.004E-02	1.701E-01
AC-228	7.181E-01	1.636E-01	5.984E-02	1.636E-01
PA-233	2.224E-02	4.494E-02	3.338E-02	4.494E-02
TH-234	1.162E+00	4.355E-01	1.978E-01	4.355E-01
NP-237	1.544E-01	1.612E-01	9.957E-02	1.612E-01
AM-243	1.063E-01	3.795E-02	2.358E-02	3.795E-02
CM-243	5.245E-02	6.283E-02	4.322E-02	6.283E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	9.790E-04	2.444E-02	2.012E-02	2.444E-02	NOT IDENT.
RH-101	2.360E-02	1.910E-02	1.788E-02	1.910E-02	NOT IDENT.
SB-125	2.498E-02	5.331E-02	4.653E-02	5.331E-02	NOT IDENT.
PO-209	-1.427E+00	4.022E+00	3.241E+00	4.022E+00	NOT IDENT.
PA-234M	1.652E+00	3.056E+00	2.180E+00	3.056E+00	NOT IDENT.
U-235	1.339E-01	1.100E-01	9.867E-02	1.100E-01	NOT IDENT.
NP-236	2.894E-02	3.296E-02	2.891E-02	3.296E-02	NOT IDENT.
NP-239	-3.936E-03	1.254E-01	1.116E-01	1.254E-01	NOT IDENT.
AM-241	1.117E-02	8.850E-02	7.238E-02	8.850E-02	NOT IDENT.
AM-246	4.093E-02	7.067E-02	6.417E-02	7.067E-02	NOT IDENT.
CF-249	1.725E-02	2.324E-02	2.069E-02	2.324E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	281.6637
63.29	293.7591
74.66	374.0831
74.81	374.2094
74.81	374.2094
77.11	376.1237
77.11	376.1237
86.48	344.0883
87.30	320.8903
87.30	320.8903
92.58	295.7390
98.44	279.3172
103.76	291.2434
105.31	345.8496
129.07	279.2419
143.76	287.5818
198.00	279.2321
209.25	265.9172
228.18	260.4485
238.63	232.1351
242.00	232.9102
269.46	216.4392
270.25	216.5971
277.36	220.8231
295.22	207.9086
300.09	212.6282
312.17	190.5476
338.32	168.4095
351.93	193.3008
387.59	130.1298
409.46	115.2939
427.87	109.2568
463.00	115.9961
510.77	89.1541
583.19	99.1134
609.31	98.5195
661.66	88.4646
727.33	76.1935
763.13	80.3379
768.36	75.4761
785.37	62.4797
794.95	44.7487
806.17	51.0730
831.80	84.2387
860.56	90.3568
896.60	54.9237
911.20	47.7751
934.06	42.8037
964.77	48.6573
968.97	48.7255
1001.03	36.4746
1078.86	36.4435
1120.29	42.1684
1155.19	53.5231
1173.23	33.6257
1238.11	50.8659
1280.96	36.6101
1332.51	35.0968
1377.67	24.3418
1401.50	32.6471
1407.98	25.5463
1460.80	23.0628
1509.23	21.5307
1588.20	34.6999
1620.50	21.4583
1729.60	12.2328
1764.49	21.7967

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701032

Total Uranium Activity	6.1944E-02	ug/g
Total Uranium Counting Unc.	5.0884E-02	ug/g
Total Uranium Tpu	5.0884E-08	ug/g
Total Uranium Mda	4.5653E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:20:34.96

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701033.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:19:52
Sample ID        : G198701033           Sample quantity  : 1.33400E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:05.74  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.63*	115	370	0.87	93.75	90	8	7.97E-03	35.0	
2	0	54.09*	35	422	1.56	108.66	104	8	2.45E-03	109.5	
3	0	63.43*	99	604	0.82	127.31	123	8	6.86E-03	50.6	
4	2	72.46	83	159	1.02	145.37	144	14	5.76E-03	19.6	4.50E+00
5	2	74.96*	591	461	0.96	150.36	144	14	4.10E-02	7.3	
6	2	77.16*	913	434	0.93	154.75	144	14	6.34E-02	5.2	
7	2	84.30*	93	533	1.10	169.03	165	27	6.48E-03	44.2	1.84E+00
8	2	87.34*	270	440	1.07	175.10	165	27	1.88E-02	14.1	
9	2	89.89	204	351	0.87	180.19	165	27	1.42E-02	15.5	
10	2	92.86*	208	463	1.12	186.13	165	27	1.44E-02	23.2	
11	0	112.79	58	408	1.27	225.95	222	8	4.06E-03	61.6	
12	0	115.81	46	353	0.62	231.99	229	7	3.20E-03	69.1	
13	0	129.29	126	387	1.14	258.92	255	8	8.72E-03	28.6	
14	0	143.87*	34	387	0.85	288.06	285	8	2.38E-03	109.9	
15	0	154.56	90	418	1.47	309.41	305	10	6.23E-03	43.9	
16	0	185.97*	239	436	1.05	372.18	367	11	1.66E-02	19.5	
17	0	205.62*	13	234	0.68	411.46	409	6	9.18E-04	199.7	
18	0	209.16	149	355	1.09	418.51	415	10	1.04E-02	25.0	
19	0	226.52	45	229	1.30	453.22	450	8	3.12E-03	60.1	
20	6	238.72*	1303	182	1.01	477.59	470	21	9.05E-02	3.4	1.79E+00
21	6	241.74	366	294	1.70	483.63	470	21	2.54E-02	10.9	
22	0	270.16	84	259	1.14	540.42	536	9	5.81E-03	36.3	
23	0	295.36*	399	230	1.06	590.78	586	11	2.77E-02	9.3	
24	0	299.97	74	184	0.91	599.99	597	8	5.16E-03	33.5	
25	0	313.78	21	109	0.46	627.59	625	5	1.45E-03	78.3	
26	0	328.31	79	236	1.33	656.63	651	11	5.51E-03	39.2	
27	0	338.46*	187	217	0.99	676.90	673	9	1.30E-02	17.1	
28	2	349.27	60	64	1.40	698.52	696	13	4.16E-03	21.4	1.75E+00
29	2	351.98*	687	107	1.19	703.92	696	13	4.77E-02	4.9	
30	0	381.23	24	113	1.30	762.37	760	7	1.70E-03	74.7	
31	0	410.15	34	199	2.75	820.18	814	12	2.38E-03	83.9	
32	0	455.21	23	90	0.93	910.22	908	7	1.58E-03	72.7	
33	0	463.08	57	164	1.24	925.97	922	11	3.93E-03	46.2	
34	0	511.06*	109	214	1.38	1021.85	1015	15	7.57E-03	37.1	
35	0	525.29	27	65	1.38	1050.28	1047	8	1.87E-03	56.0	
36	0	529.05	38	78	1.12	1057.80	1054	9	2.67E-03	44.1	
37	0	565.86	27	109	1.41	1131.38	1127	10	1.85E-03	76.2	
38	0	583.17*	386	96	1.37	1165.97	1159	12	2.68E-02	7.5	

Sample ID : G198701033 Acquisition date : 14-DEC-2007 08:19:52

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	609.27*	470	179	1.52	1218.13	1212	15	3.27E-02	8.1	
40	0	661.58*	91	105	0.91	1322.69	1319	10	6.30E-03	24.7	
41	0	727.64	97	52	1.88	1454.72	1450	10	6.75E-03	17.2	
42	0	755.23	22	69	1.35	1509.88	1504	10	1.53E-03	73.8	
43	0	767.65	51	89	1.14	1534.68	1530	11	3.54E-03	38.4	
44	0	794.99	33	49	1.09	1589.34	1585	8	2.29E-03	40.9	
45	0	807.72	18	61	1.50	1614.79	1609	12	1.22E-03	91.4	
46	0	860.60	42	73	0.93	1720.48	1716	12	2.91E-03	43.4	
47	0	911.08*	244	59	1.48	1821.39	1815	12	1.70E-02	9.5	
48	0	934.38	28	50	3.21	1867.96	1863	11	1.91E-03	53.1	
49	0	943.05	19	20	0.91	1885.29	1882	6	1.30E-03	44.9	
50	2	964.68	44	62	2.00	1928.53	1921	23	3.08E-03	38.1	1.79E+00
51	2	969.05*	139	40	1.54	1937.27	1921	23	9.69E-03	12.6	
52	0	1023.75	18	31	1.45	2046.62	2042	8	1.22E-03	60.4	
53	0	1120.72*	84	66	1.71	2240.47	2233	15	5.86E-03	25.5	
54	0	1156.22	10	45	0.91	2311.45	2304	9	7.23E-04	120.1	
55	0	1201.62	34	52	3.27	2402.21	2394	16	2.35E-03	50.7	
56	0	1243.13	54	123	4.09	2485.19	2466	29	3.74E-03	62.3	
57	0	1251.71	46	53	4.84	2502.35	2494	23	3.18E-03	43.5	
58	0	1282.93	32	45	5.85	2564.76	2557	17	2.24E-03	51.4	
59	0	1378.25	37	24	1.59	2755.34	2749	11	2.56E-03	30.8	
60	0	1407.88	22	19	2.80	2814.57	2807	13	1.51E-03	46.9	
61	0	1412.84	17	13	1.56	2824.49	2820	9	1.19E-03	45.5	
62	0	1460.67*	451	20	1.95	2920.12	2912	16	3.13E-02	5.4	
63	0	1495.40	12	10	1.41	2989.58	2983	10	8.55E-04	55.7	
64	4	1553.13	18	9	1.93	3105.00	3095	19	1.22E-03	44.7	1.23E+00
65	4	1556.08	16	1	1.27	3110.89	3095	19	1.10E-03	30.7	
66	0	1588.73	15	32	1.43	3176.19	3170	12	1.03E-03	78.9	
67	0	1661.49	10	6	1.39	3321.67	3317	8	7.03E-04	52.3	
68	0	1731.32*	2	19	0.90	3461.32	3454	10	1.62E-04	370.9	
69	0	1733.49	11	1	1.36	3465.65	3463	7	7.47E-04	36.1	
70	0	1764.32*	83	5	2.28	3527.31	3518	16	5.73E-03	14.1	
71	0	2042.29	7	9	0.83	4083.20	4075	13	4.69E-04	102.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701033       *
* Acquisition date : 14-DEC-2007 08:19:52 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:05.74     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701033           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3340E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	6.671E+00	7.847E-01	3.142E-01	0.000E+00
CS-137	8.426E-02	4.120E-02	4.546E-02	0.000E+00
TL-208	3.191E-01	5.162E-02	3.928E-02	0.000E+00
BI-212	7.077E-01	2.442E-01	3.116E-01	0.000E+00
PB-212	9.574E-01	9.850E-02	5.259E-02	0.000E+00
BI-214	7.421E-01	1.284E-01	7.344E-02	0.000E+00
PB-214	8.005E-01	9.276E-02	6.957E-02	0.000E+00
RA-223	2.140E-01	1.533E-01	1.754E-01	0.000E+00
AC-228	9.987E-01	1.969E-01	1.595E-01	0.000E+00
PA-233	2.145E-02	3.297E-02	5.951E-02	0.000E+00
TH-234	7.759E-01	3.568E-01	3.707E-01	0.000E+00
U-235	7.243E-02	1.561E-01	1.772E-01	0.000E+00
NP-237	4.364E-01	1.238E-01	1.595E-01	0.000E+00
NP-239	1.279E-01	1.509E-01	2.038E-01	0.000E+00
AM-243	1.719E-01	2.703E-02	3.001E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	1.452E-02	2.703E-02	4.737E-02	0.000E+00	NOT IDENT.
RH-101	-3.580E-03	2.045E-02	3.262E-02	0.000E+00	NOT IDENT.
SB-125	-1.874E-03	5.742E-02	9.912E-02	0.000E+00	NOT IDENT.
EU-155	3.346E-02	5.374E-02	9.192E-02	0.000E+00	NOT IDENT.
PO-209	-4.926E+00	4.920E+00	7.657E+00	0.000E+00	NOT IDENT.
BI-211	-8.549E-01	6.801E-01	1.044E+00	0.000E+00	NOT IDENT.
PA-234M	-2.684E+00	3.368E+00	4.874E+00	0.000E+00	NOT IDENT.
NP-236	3.733E-02	3.110E-02	5.220E-02	0.000E+00	NOT IDENT.
AM-241	1.218E-03	3.145E-02	5.234E-02	0.000E+00	NOT IDENT.
CM-243	1.656E-02	4.773E-02	8.087E-02	0.000E+00	NOT IDENT.
AM-246	4.710E-03	8.841E-02	1.492E-01	0.000E+00	NOT IDENT.
CF-249	4.473E-04	2.441E-02	4.261E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:20:35.98

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701033.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:19:52
Sample ID        : G198701033           Sample quantity  : 1.33400E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:05.74  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	451	10.66*	8.925E-01	6.671E+00	6.671E+00	12.00
CS-137	661.66	91	85.10*	1.790E+00	8.385E-02	8.426E-02	49.90
TL-208	277.36	------	6.31	3.932E+00	------	Line Not Found	------
	510.77	109	22.60	2.281E+00	2.975E-01	2.975E-01	74.53
	583.19	386	84.50*	2.015E+00	3.191E-01	3.191E-01	16.51
	763.13	------	1.81	1.568E+00	------	Line Not Found	------
	860.56	42	12.42	1.404E+00	3.382E-01	3.382E-01	87.05
BI-212	727.33	97	11.80*	1.638E+00	7.077E-01	7.077E-01	35.21
	785.37	------	1.10	1.527E+00	------	Line Not Found	------
	1620.50	------	1.49	8.223E-01	------	Line Not Found	------
PB-212	74.81	591	10.40	7.088E+00	1.127E+00	1.127E+00	16.04
	77.11	913	17.50	7.087E+00	1.036E+00	1.036E+00	12.24
	87.30	270	7.81	7.032E+00	6.929E-01	6.929E-01	28.94
	238.63	1303	43.30*	4.423E+00	9.574E-01	9.574E-01	10.50
	300.09	74	3.28	3.685E+00	8.649E-01	8.649E-01	67.32
BI-214	609.31	470	46.10*	1.934E+00	7.420E-01	7.421E-01	17.66
	768.36	51	4.94	1.559E+00	9.310E-01	9.311E-01	77.04
	806.17	18	1.22	1.488E+00	1.365E+00	1.365E+00	182.94
	934.06	28	3.03	1.304E+00	9.792E-01	9.793E-01	106.38
	1120.29	84	15.10	1.112E+00	7.069E-01	7.070E-01	51.31
	1155.19	10	1.63	1.083E+00	8.299E-01	8.299E-01	240.25
	1238.11	------	5.79	1.022E+00	------	Line Not Found	------
	1280.96	32	1.43	9.920E-01	3.204E+00	3.204E+00	102.94
	1377.67	37	4.00	9.353E-01	1.386E+00	1.386E+00	61.90
	1401.50	------	1.27	9.227E-01	------	Line Not Found	------
	1407.98	22	2.15	9.193E-01	1.552E+00	1.552E+00	93.86
	1509.23	------	2.11	8.695E-01	------	Line Not Found	------
	1729.60	2	2.92	7.814E-01	1.443E-01	1.443E-01	741.79
	1764.49	83	15.40	7.702E-01	9.795E-01	9.796E-01	28.66
PB-214	74.81	591	6.44	7.088E+00	1.821E+00	1.821E+00	16.04
	77.11	913	10.80	7.087E+00	1.679E+00	1.679E+00	12.24
	87.30	270	4.84	7.032E+00	1.118E+00	1.118E+00	28.94

Sample ID : G198701033 Acquisition date : 14-DEC-2007 08:19:52

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	366	7.43	4.381E+00	1.583E+00	1.583E+00	23.12
	295.22	399	19.30	3.734E+00	7.794E-01	7.795E-01	20.14
	351.93	687	37.60*	3.210E+00	8.004E-01	8.005E-01	11.82
RA-223	269.46	84	13.70*	4.017E+00	2.140E-01	2.140E-01	73.09
AC-228	129.07	126	2.42	6.353E+00	1.149E+00	1.149E+00	58.13
	209.25	149	3.89	4.867E+00	1.111E+00	1.111E+00	50.65
	270.25	84	3.46	4.017E+00	8.474E-01	8.474E-01	73.09
	338.32	187	11.27	3.323E+00	7.040E-01	7.040E-01	34.85
	409.46	34	1.92	2.797E+00	8.983E-01	8.983E-01	167.82
	463.00	57	4.40	2.501E+00	7.226E-01	7.226E-01	92.63
	794.95	33	4.25	1.510E+00	7.231E-01	7.231E-01	82.14
	911.20	244	25.80*	1.334E+00	9.987E-01	9.987E-01	20.12
	964.77	44	4.99	1.268E+00	9.877E-01	9.877E-01	76.46
	968.97	139	15.80	1.262E+00	9.838E-01	9.838E-01	26.08
	1588.20	15	3.22	8.351E-01	7.760E-01	7.760E-01	157.95
PA-233	312.17	21	38.60*	3.548E+00	2.145E-02	2.145E-02	156.85
TH-234	63.29	99	4.80	7.002E+00	4.136E-01	4.136E-01	101.38
	92.58	208	5.41*	6.974E+00	7.759E-01	7.759E-01	46.93
U-235	143.76	34	10.96*	6.063E+00	7.243E-02	7.243E-02	219.89
NP-237	86.48	270	12.40*	7.032E+00	4.364E-01	4.364E-01	28.94
NP-239	228.18	45	10.76*	4.598E+00	1.279E-01	1.279E-01	120.37
AM-243	74.66	591	68.20*	7.088E+00	1.719E-01	1.719E-01	16.04

Flag: "*" = Keyline

Sample ID : G198701033 Acquisition date : 14-DEC-2007 08:19:52

Total number of lines in spectrum 71
Number of unidentified lines 30
Number of lines tentatively identified by NID 41 57.75%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	6.671E+00	6.671E+00	0.801E+00	12.00	
CS-137	9.47E+08S	1.00	8.385E-02	8.426E-02	4.204E-02	49.90	
TL-208	4.43E+17S	1.00	3.191E-01	3.191E-01	0.527E-01	16.51	
BI-212	4.43E+17S	1.00	7.077E-01	7.077E-01	2.492E-01	35.21	
PB-212	4.43E+17S	1.00	9.574E-01	9.574E-01	1.005E-01	10.50	
BI-214	5.05E+10S	1.00	7.420E-01	7.421E-01	1.310E-01	17.66	
PB-214	5.05E+10S	1.00	8.004E-01	8.005E-01	0.947E-01	11.82	
RA-223	1.04E+12S	1.00	2.140E-01	2.140E-01	1.564E-01	73.09	
AC-228	4.43E+17S	1.00	9.987E-01	9.987E-01	2.009E-01	20.12	
PA-233	6.75E+13S	1.00	2.145E-02	2.145E-02	3.364E-02	156.85	
TH-234	1.41E+17S	1.00	7.759E-01	7.759E-01	3.641E-01	46.93	
U-235	2.22E+16S	1.00	7.243E-02	7.243E-02	15.93E-02	219.89	
NP-237	6.75E+13S	1.00	4.364E-01	4.364E-01	1.263E-01	28.94	
NP-239	2.33E+11S	1.00	1.279E-01	1.279E-01	1.540E-01	120.37	
AM-243	2.33E+11S	1.00	1.719E-01	1.719E-01	0.276E-01	16.04	
			---	---			
	Total Activity :		1.310E+01	1.310E+01			

Grand Total Activity : 1.310E+01 1.310E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701033 Acquisition date : 14-DEC-2007 08:19:52

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.63	115	370	0.87	93.75	90	8	7.97E-03	69.9	6.48E+00	
0	54.09	35	422	1.56	108.66	104	8	2.45E-03	****	6.79E+00	
2	72.46	83	159	1.02	145.37	144	14	5.76E-03	39.2	7.08E+00	
2	84.30	93	533	1.10	169.03	165	27	6.48E-03	88.5	7.06E+00	
2	89.89	204	351	0.87	180.19	165	27	1.42E-02	31.0	7.01E+00	
0	112.79	58	408	1.27	225.95	222	8	4.06E-03	****	6.67E+00	
0	115.81	46	353	0.62	231.99	229	7	3.20E-03	****	6.61E+00	
0	154.56	90	418	1.47	309.41	305	10	6.23E-03	87.8	5.85E+00	
0	185.97	239	436	1.05	372.18	367	11	1.66E-02	39.0	5.26E+00	
0	205.62	13	234	0.68	411.46	409	6	9.18E-04	****	4.92E+00	
0	328.31	79	236	1.33	656.63	651	11	5.51E-03	78.3	3.41E+00	
2	349.27	60	64	1.40	698.52	696	13	4.16E-03	42.8	3.23E+00	
0	381.23	24	113	1.30	762.37	760	7	1.70E-03	****	2.99E+00	
0	455.21	23	90	0.93	910.22	908	7	1.58E-03	****	2.54E+00	
0	525.29	27	65	1.38	1050.28	1047	8	1.87E-03	****	2.22E+00	
0	529.05	38	78	1.12	1057.80	1054	9	2.67E-03	88.3	2.21E+00	
0	565.86	27	109	1.41	1131.38	1127	10	1.85E-03	****	2.07E+00	
0	755.23	22	69	1.35	1509.88	1504	10	1.53E-03	****	1.58E+00	
0	943.05	19	20	0.91	1885.29	1882	6	1.30E-03	89.7	1.29E+00	
0	1023.75	18	31	1.45	2046.62	2042	8	1.22E-03	****	1.20E+00	
0	1201.62	34	52	3.27	2402.21	2394	16	2.35E-03	****	1.05E+00	
0	1243.13	54	123	4.09	2485.19	2466	29	3.74E-03	****	1.02E+00	
0	1251.71	46	53	4.84	2502.35	2494	23	3.18E-03	87.0	1.01E+00	
0	1412.84	17	13	1.56	2824.49	2820	9	1.19E-03	91.1	9.17E-01	
0	1495.40	12	10	1.41	2989.58	2983	10	8.55E-04	****	8.76E-01	
4	1553.13	18	9	1.93	3105.00	3095	19	1.22E-03	89.4	8.50E-01	
4	1556.08	16	1	1.27	3110.89	3095	19	1.10E-03	61.5	8.49E-01	
0	1661.49	10	6	1.39	3321.67	3317	8	7.03E-04	****	8.06E-01	
0	1733.49	11	1	1.36	3465.65	3463	7	7.47E-04	72.2	7.81E-01	
0	2042.29	7	9	0.83	4083.20	4075	13	4.69E-04	****	6.90E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701033            *
* Acquisition date : 14-DEC-2007 08:19:52 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:05.74     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701033           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3340E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	6.671E+00	7.847E-01	1.572E-01	7.847E-01
CS-137	8.426E-02	4.120E-02	2.274E-02	4.120E-02
TL-208	3.191E-01	5.162E-02	1.965E-02	5.162E-02
BI-212	7.077E-01	2.442E-01	1.559E-01	2.442E-01
PB-212	9.574E-01	9.850E-02	2.631E-02	9.850E-02
BI-214	7.421E-01	1.284E-01	3.674E-02	1.284E-01
PB-214	8.005E-01	9.276E-02	3.481E-02	9.276E-02
RA-223	2.140E-01	1.533E-01	8.775E-02	1.533E-01
AC-228	9.987E-01	1.969E-01	7.980E-02	1.969E-01
PA-233	2.145E-02	3.297E-02	2.977E-02	3.297E-02
TH-234	7.759E-01	3.568E-01	1.854E-01	3.568E-01
U-235	7.243E-02	1.561E-01	8.864E-02	1.561E-01
NP-237	4.364E-01	1.238E-01	7.981E-02	1.238E-01
NP-239	1.279E-01	1.509E-01	1.020E-01	1.509E-01
AM-243	1.719E-01	2.703E-02	1.501E-02	2.703E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.452E-02	2.703E-02	2.370E-02	2.703E-02	NOT IDENT.
RH-101	-3.580E-03	2.045E-02	1.632E-02	2.045E-02	NOT IDENT.
SB-125	-1.874E-03	5.742E-02	4.959E-02	5.742E-02	NOT IDENT.
EU-155	3.346E-02	5.374E-02	4.599E-02	5.374E-02	NOT IDENT.
PO-209	-4.926E+00	4.920E+00	3.831E+00	4.920E+00	NOT IDENT.
BI-211	-8.549E-01	6.801E-01	5.225E-01	6.801E-01	NOT IDENT.
PA-234M	-2.684E+00	3.368E+00	2.439E+00	3.368E+00	NOT IDENT.
NP-236	3.733E-02	3.110E-02	2.611E-02	3.110E-02	NOT IDENT.
AM-241	1.218E-03	3.145E-02	2.619E-02	3.145E-02	NOT IDENT.
CM-243	1.656E-02	4.773E-02	4.046E-02	4.773E-02	NOT IDENT.
AM-246	4.710E-03	8.841E-02	7.466E-02	8.841E-02	NOT IDENT.
CF-249	4.473E-04	2.441E-02	2.132E-02	2.441E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	351.1736
63.29	405.9995
74.66	441.7698
74.81	441.9151
74.81	441.9151
77.11	444.1371
77.11	444.1371
86.48	409.1238
87.30	409.7929
87.30	409.7929
92.58	414.0247
98.44	315.4772
103.76	301.1914
105.31	299.1804
129.07	320.7888
143.76	297.6858
198.00	269.2714
209.25	226.4625
228.18	219.3501
238.63	221.6442
242.00	222.3734
269.46	205.0882
270.25	205.2331
277.36	205.3693
295.22	148.4458
300.09	168.9213
312.17	147.6551
338.32	162.7602
351.93	156.1037
387.59	151.5601
409.46	149.9420
427.87	127.4100
463.00	114.2805
510.77	118.4630
583.19	100.7549
609.31	96.6769
661.66	107.4142
727.33	82.4243
763.13	75.0592
768.36	101.3123
785.37	89.9405
794.95	61.4254
806.17	46.7358
831.80	85.8857
860.56	62.9546
896.60	76.3307
911.20	68.9511
934.06	61.9897
964.77	57.3571
968.97	57.4364
1001.03	59.0389
1078.86	51.2598
1120.29	51.8945
1155.19	60.8065
1173.23	45.3117
1238.11	62.5773
1280.96	48.8254
1332.51	31.8858
1377.67	47.2584
1401.50	25.5647
1407.98	22.4043
1460.80	20.7978
1509.23	30.5911
1588.20	30.1624
1620.50	17.6367
1729.60	17.1833
1764.49	22.4961

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701033

Total Uranium Activity	3.3515E-02	ug/g
Total Uranium Counting Unc.	7.2224E-02	ug/g
Total Uranium Tpu	7.2224E-08	ug/g
Total Uranium Mda	4.1015E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:33:53.80

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701034.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:33:21
Sample ID         : G198701034           Sample quantity  : 1.09220E+02 GRAM
Detector name     : GAM14                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00         Elapsed real time: 0 04:00:01.63  0.0%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708131               Detector SN#     :
Matrix Spike ID  :                       LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.05*	39	480	1.53	126.07	122	10	2.72E-03	112.7	
2	2	74.81*	319	523	1.68	149.58	142	19	2.22E-02	16.5	4.48E+00
3	2	77.38*	545	446	1.53	154.72	142	19	3.79E-02	9.1	
4	2	84.07	96	459	1.69	168.10	161	29	6.69E-03	42.4	1.20E+00
5	2	87.20	263	401	1.45	174.36	161	29	1.83E-02	15.1	
6	2	89.99	183	389	1.44	179.92	161	29	1.27E-02	21.9	
7	2	92.75*	268	421	1.67	185.45	161	29	1.86E-02	17.8	
8	0	129.20	63	288	1.21	258.32	254	8	4.34E-03	48.9	
9	0	144.05*	118	351	0.72	288.02	283	11	8.17E-03	34.2	
10	0	158.90	35	271	1.26	317.71	312	8	2.45E-03	82.7	
11	0	185.45*	296	475	1.53	370.78	363	17	2.06E-02	18.8	
12	0	208.92	131	342	1.51	417.72	413	11	9.09E-03	28.8	
13	4	238.54*	1012	233	1.47	476.93	471	19	7.03E-02	4.5	1.21E+00
14	4	241.48	335	255	2.27	482.82	471	19	2.33E-02	15.8	
15	0	270.47	84	295	2.23	540.79	535	12	5.85E-03	42.1	
16	2	295.12*	339	180	1.66	590.07	585	19	2.35E-02	9.5	1.56E+00
17	2	299.99	86	138	1.68	599.80	585	19	5.94E-03	26.0	
18	0	306.22	36	148	1.32	612.28	607	9	2.51E-03	63.0	
19	0	326.62	69	272	1.06	653.06	648	13	4.79E-03	50.6	
20	0	338.35	241	273	1.44	676.51	670	15	1.68E-02	16.3	
21	0	351.76*	514	178	1.46	703.34	698	12	3.57E-02	7.4	
22	0	409.89	29	137	0.96	819.58	815	9	2.00E-03	76.1	
23	0	462.92	50	134	1.37	925.63	921	9	3.50E-03	43.9	
24	0	511.10*	49	197	2.16	1021.99	1013	20	3.40E-03	86.3	
25	0	520.51	20	25	1.43	1040.81	1039	5	1.38E-03	44.7	
26	0	568.89*	110	101	1.49	1137.57	1130	15	7.66E-03	27.2	
27	0	583.11*	281	111	1.48	1166.01	1159	13	1.95E-02	10.5	
28	0	609.25*	381	129	1.81	1218.29	1211	17	2.64E-02	8.9	
29	0	643.07	16	61	3.14	1285.94	1279	12	1.11E-03	100.4	
30	0	651.13	34	54	2.88	1302.07	1296	12	2.35E-03	47.6	
31	0	661.65	336	84	1.48	1323.11	1316	14	2.34E-02	7.9	
32	0	727.68	79	105	1.66	1455.18	1447	17	5.49E-03	31.9	
33	0	771.26	58	95	7.05	1542.35	1534	18	4.01E-03	43.1	
34	0	787.00	19	67	1.70	1573.84	1566	12	1.30E-03	91.2	
35	0	795.30	47	52	2.38	1590.43	1583	14	3.27E-03	35.7	
36	0	804.34	44	64	3.65	1608.53	1602	14	3.09E-03	40.8	
37	0	861.07	68	75	2.35	1722.01	1713	21	4.74E-03	33.7	
38	0	911.43*	218	45	1.51	1822.77	1816	14	1.51E-02	9.8	

Sample ID : G198701034 Acquisition date : 14-DEC-2007 08:33:21

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	970.30	100	124	0.94	1940.54	1931	20	6.95E-03	30.8	
40	0	1001.98*	2	26	0.62	2003.93	1998	8	1.22E-04	654.8	
41	4	1074.44	25	10	2.41	2148.90	2145	23	1.73E-03	30.6	1.08E+00
42	4	1078.90	18	22	2.37	2157.82	2145	23	1.25E-03	62.1	
43	0	1110.89	14	26	1.63	2221.83	2217	10	9.72E-04	72.3	
44	0	1121.03	80	66	2.04	2242.13	2233	19	5.57E-03	25.5	
45	0	1187.44	33	87	6.63	2375.00	2359	29	2.26E-03	84.1	
46	10	1213.72*	7	11	3.57	2427.59	2424	22	4.75E-04	124.7	2.80E+00
47	10	1216.92	26	21	2.01	2434.00	2424	22	1.83E-03	39.9	
48	1	1238.41	34	36	2.01	2477.00	2469	19	2.37E-03	40.4	5.81E+00
49	1	1241.41	26	30	2.02	2483.00	2469	19	1.77E-03	44.6	
50	0	1379.08	16	27	1.65	2758.51	2750	14	1.09E-03	75.3	
51	0	1449.28	28	16	6.34	2899.02	2887	21	1.97E-03	39.7	
52	0	1461.16*	323	13	1.63	2922.79	2916	16	2.24E-02	6.3	
53	0	1590.57	39	23	5.07	3181.81	3173	18	2.73E-03	32.5	
54	0	1685.72	26	0	0.64	3372.27	3366	13	1.81E-03	19.6	
55	0	1730.83	19	13	1.25	3462.58	3455	13	1.32E-03	45.4	
56	0	1764.88*	67	18	1.98	3530.74	3522	14	4.66E-03	20.4	
57	0	1817.71	14	6	4.14	3636.51	3628	14	9.41E-04	49.2	
58	0	1822.64	7	11	0.90	3646.37	3641	11	4.55E-04	106.0	
59	0	1833.27	10	9	0.72	3667.65	3656	18	6.94E-04	77.1	
60	0	1946.22*	6	6	0.65	3893.80	3887	12	4.49E-04	98.2	
61	0	1961.90	14	7	4.38	3925.19	3917	15	9.95E-04	48.9	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701034       *
* Acquisition date : 14-DEC-2007 08:33:21 Detector SN#    :                 *
* Detector ID      : GAM14                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.63     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701034           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.0922E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-MAR-2007 18:40:51 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.237E+00	5.724E-01	3.155E-01	0.000E+00
CS-137	2.727E-01	4.729E-02	3.601E-02	0.000E+00
TL-208	2.044E-01	4.439E-02	3.330E-02	0.000E+00
BI-212	5.012E-01	3.157E-01	2.460E-01	0.000E+00
PB-212	7.112E-01	7.650E-02	5.183E-02	0.000E+00
BI-214	5.273E-01	9.966E-02	6.042E-02	0.000E+00
PB-214	5.560E-01	8.675E-02	6.250E-02	0.000E+00
RA-223	2.050E-01	1.698E-01	1.676E-01	0.000E+00
AC-228	7.763E-01	1.635E-01	1.193E-01	0.000E+00
PA-234M	2.093E-01	2.686E+00	4.213E+00	0.000E+00
TH-234	1.114E+00	3.980E-01	3.838E-01	0.000E+00
U-235	2.437E-01	1.642E-01	1.757E-01	0.000E+00
NP-237	4.937E-01	1.518E-01	1.738E-01	0.000E+00
AM-243	1.258E-01	4.170E-02	3.738E-02	0.000E+00
AM-246	6.973E-02	8.508E-02	1.215E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	1.401E-02		2.416E-02	4.054E-02	0.000E+00	NOT IDENT.
RH-101	1.596E-02		1.892E-02	3.367E-02	0.000E+00	NOT IDENT.
SB-125	-2.417E-02		5.424E-02	8.869E-02	0.000E+00	NOT IDENT.
EU-155	-5.948E-03		5.669E-02	9.429E-02	0.000E+00	NOT IDENT.
PO-209	3.622E+00		4.024E+00	7.325E+00	0.000E+00	NOT IDENT.
BI-211	4.407E-01		5.547E-01	1.003E+00	0.000E+00	NOT IDENT.
PA-233	3.457E-02		3.908E-02	6.580E-02	0.000E+00	NOT IDENT.
NP-236	-1.269E-03		3.197E-02	5.153E-02	0.000E+00	NOT IDENT.
NP-239	-6.925E-02		1.262E-01	2.126E-01	0.000E+00	NOT IDENT.
AM-241	8.132E-03		7.644E-02	1.066E-01	0.000E+00	NOT IDENT.
CM-243	2.785E-03		5.187E-02	8.683E-02	0.000E+00	NOT IDENT.
CF-249	-1.958E-02		2.328E-02	3.743E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:33:54.79

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701034.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:33:21
Sample ID        : G198701034           Sample quantity  : 1.09220E+02 GRAM
Detector name    : GAM14                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.63  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	323	10.66*	1.229E+00	4.237E+00	4.237E+00	13.79
CS-137	661.66	336	85.10*	2.503E+00	2.713E-01	2.727E-01	17.70
TL-208	277.36	------	6.31	5.062E+00	------	Line Not Found	------
	510.77	49	22.60	3.127E+00	1.191E-01	1.191E-01	172.70
	583.19	281	84.50*	2.795E+00	2.044E-01	2.044E-01	22.16
	763.13	------	1.81	2.201E+00	------	Line Not Found	------
	860.56	68	12.42	1.970E+00	4.795E-01	4.795E-01	67.95
BI-212	727.33	79	11.80*	2.298E+00	5.012E-01	5.012E-01	64.27
	785.37	19	1.10	2.140E+00	1.371E+00	1.371E+00	182.55
	1620.50	------	1.49	1.140E+00	------	Line Not Found	------
PB-212	74.81	319	10.40	6.400E+00	8.248E-01	8.248E-01	33.83
	77.11	545	17.50	6.657E+00	8.042E-01	8.042E-01	19.77
	87.30	263	7.81	7.388E+00	7.838E-01	7.838E-01	31.38
	238.63	1012	43.30*	5.645E+00	7.112E-01	7.112E-01	10.98
	300.09	86	3.28	4.775E+00	9.383E-01	9.383E-01	52.41
BI-214	609.31	381	46.10*	2.691E+00	5.273E-01	5.273E-01	19.28
	768.36	------	4.94	2.187E+00	------	Line Not Found	------
	806.17	44	1.22	2.097E+00	2.987E+00	2.987E+00	81.96
	934.06	------	3.03	1.826E+00	------	Line Not Found	------
	1120.29	80	15.10	1.543E+00	5.911E-01	5.912E-01	51.42
	1155.19	------	1.63	1.502E+00	------	Line Not Found	------
	1238.11	34	5.79	1.411E+00	7.169E-01	7.169E-01	81.09
	1280.96	------	1.43	1.371E+00	------	Line Not Found	------
	1377.67	16	4.00	1.288E+00	5.260E-01	5.261E-01	150.72
	1401.50	------	1.27	1.271E+00	------	Line Not Found	------
	1407.98	------	2.15	1.266E+00	------	Line Not Found	------
	1509.23	------	2.11	1.199E+00	------	Line Not Found	------
	1729.60	19	2.92	1.093E+00	1.023E+00	1.023E+00	90.88
	1764.49	67	15.40	1.081E+00	6.935E-01	6.936E-01	41.13
PB-214	74.81	319	6.44	6.400E+00	1.332E+00	1.332E+00	33.83
	77.11	545	10.80	6.657E+00	1.303E+00	1.303E+00	19.77
	87.30	263	4.84	7.388E+00	1.265E+00	1.265E+00	31.38

Sample ID : G198701034 Acquisition date : 14-DEC-2007 08:33:21

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	335	7.43	5.596E+00	1.384E+00	1.384E+00	32.21
	295.22	339	19.30	4.834E+00	6.238E-01	6.239E-01	19.96
	351.93	514	37.60*	4.227E+00	5.559E-01	5.560E-01	15.92
RA-223	269.46	84	13.70*	5.157E+00	2.050E-01	2.050E-01	84.51
AC-228	129.07	63	2.42	7.834E+00	5.665E-01	5.665E-01	98.03
	209.25	131	3.89	6.180E+00	9.353E-01	9.353E-01	57.89
	270.25	84	3.46	5.157E+00	8.115E-01	8.115E-01	84.51
	338.32	241	11.27	4.356E+00	8.451E-01	8.451E-01	33.07
	409.46	29	1.92	3.747E+00	6.877E-01	6.877E-01	152.29
	463.00	50	4.40	3.395E+00	5.793E-01	5.793E-01	87.94
	794.95	47	4.25	2.119E+00	8.976E-01	8.976E-01	71.99
	911.20	218	25.80*	1.868E+00	7.763E-01	7.763E-01	21.49
	964.77	------	4.99	1.772E+00	------	Line Not Found	------
	968.97	100	15.80	1.763E+00	6.172E-01	6.172E-01	62.17
	1588.20	------	3.22	1.156E+00	------	Line Not Found	------
PA-234M	1001.03	2	0.84*	1.711E+00	2.093E-01	2.093E-01	1309.67
TH-234	63.29	39	4.80	4.834E+00	2.903E-01	2.903E-01	225.48
	92.58	268	5.41*	7.649E+00	1.114E+00	1.114E+00	36.46
U-235	143.76	118	10.96*	7.567E+00	2.437E-01	2.437E-01	68.77
NP-237	86.48	263	12.40*	7.388E+00	4.937E-01	4.937E-01	31.38
AM-243	74.66	319	68.20*	6.400E+00	1.258E-01	1.258E-01	33.83
AM-246	1078.86	18	27.80*	1.598E+00	6.973E-02	6.973E-02	124.50

Flag: "*" = Keyline

Sample ID : G198701034 Acquisition date : 14-DEC-2007 08:33:21

Total number of lines in spectrum 61
Number of unidentified lines 25
Number of lines tentatively identified by NID 36 59.02%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.237E+00	4.237E+00	0.584E+00	13.79	
CS-137	9.47E+08S	1.00	2.713E-01	2.727E-01	0.483E-01	17.70	
TL-208	4.43E+17S	1.00	2.044E-01	2.044E-01	0.453E-01	22.16	
BI-212	4.43E+17S	1.00	5.012E-01	5.012E-01	3.221E-01	64.27	
PB-212	4.43E+17S	1.00	7.112E-01	7.112E-01	0.781E-01	10.98	
BI-214	5.05E+10S	1.00	5.273E-01	5.273E-01	1.017E-01	19.28	
PB-214	5.05E+10S	1.00	5.559E-01	5.560E-01	0.885E-01	15.92	
RA-223	1.04E+12S	1.00	2.050E-01	2.050E-01	1.732E-01	84.51	
AC-228	4.43E+17S	1.00	7.763E-01	7.763E-01	1.669E-01	21.49	
PA-234M	1.41E+17S	1.00	2.093E-01	2.093E-01	27.41E-01	1309.67	
TH-234	1.41E+17S	1.00	1.114E+00	1.114E+00	0.406E+00	36.46	
U-235	2.22E+16S	1.00	2.437E-01	2.437E-01	1.676E-01	68.77	
NP-237	6.75E+13S	1.00	4.937E-01	4.937E-01	1.549E-01	31.38	
AM-243	2.33E+11S	1.00	1.258E-01	1.258E-01	0.426E-01	33.83	
AM-246	2.18E+11S	1.00	6.973E-02	6.973E-02	8.682E-02	124.50	
			---	---			
	Total Activity :		1.025E+01	1.025E+01			

Grand Total Activity : 1.025E+01 1.025E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701034 Acquisition date : 14-DEC-2007 08:33:21

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	84.07	96	459	1.69	168.10	161	29	6.69E-03	84.7	7.20E+00	
2	89.99	183	389	1.44	179.92	161	29	1.27E-02	43.8	7.53E+00	
0	158.90	35	271	1.26	317.71	312	8	2.45E-03	****	7.25E+00	
0	185.45	296	475	1.53	370.78	363	17	2.06E-02	37.7	6.66E+00	
0	306.22	36	148	1.32	612.28	607	9	2.51E-03	****	4.70E+00	
0	326.62	69	272	1.06	653.06	648	13	4.79E-03	****	4.48E+00	
0	520.51	20	25	1.43	1040.81	1039	5	1.38E-03	89.4	3.08E+00	
0	568.89	110	101	1.49	1137.57	1130	15	7.66E-03	54.4	2.86E+00	
0	643.07	16	61	3.14	1285.94	1279	12	1.11E-03	****	2.57E+00	
0	651.13	34	54	2.88	1302.07	1296	12	2.35E-03	95.3	2.54E+00	
0	771.26	58	95	7.05	1542.35	1534	18	4.01E-03	86.1	2.18E+00	
4	1074.44	25	10	2.41	2148.90	2145	23	1.73E-03	61.2	1.60E+00	
0	1110.89	14	26	1.63	2221.83	2217	10	9.72E-04	****	1.56E+00	
0	1187.44	33	87	6.63	2375.00	2359	29	2.26E-03	****	1.47E+00	
10	1213.72	7	11	3.57	2427.59	2424	22	4.75E-04	****	1.44E+00	
10	1216.92	26	21	2.01	2434.00	2424	22	1.83E-03	79.9	1.43E+00	
1	1241.41	26	30	2.02	2483.00	2469	19	1.77E-03	89.3	1.41E+00	
0	1449.28	28	16	6.34	2899.02	2887	21	1.97E-03	79.5	1.24E+00	
0	1590.57	39	23	5.07	3181.81	3173	18	2.73E-03	65.0	1.15E+00	
0	1685.72	26	0	0.64	3372.27	3366	13	1.81E-03	39.2	1.11E+00	
0	1817.71	14	6	4.14	3636.51	3628	14	9.41E-04	98.5	1.06E+00	
0	1822.64	7	11	0.90	3646.37	3641	11	4.55E-04	****	1.06E+00	
0	1833.27	10	9	0.72	3667.65	3656	18	6.94E-04	****	1.06E+00	
0	1946.22	6	6	0.65	3893.80	3887	12	4.49E-04	****	1.03E+00	
0	1961.90	14	7	4.38	3925.19	3917	15	9.95E-04	97.8	1.03E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701034            *
* Acquisition date : 14-DEC-2007 08:33:21 Detector SN#    :                 *
* Detector ID      : GAM14                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.63     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701034           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.0922E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-MAR-2007 18:40:51 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.237E+00	5.724E-01	1.578E-01	5.724E-01
CS-137	2.727E-01	4.729E-02	1.802E-02	4.729E-02
TL-208	2.044E-01	4.439E-02	1.666E-02	4.439E-02
BI-212	5.012E-01	3.157E-01	1.231E-01	3.157E-01
PB-212	7.112E-01	7.650E-02	2.593E-02	7.650E-02
BI-214	5.273E-01	9.966E-02	3.023E-02	9.966E-02
PB-214	5.560E-01	8.675E-02	3.127E-02	8.675E-02
RA-223	2.050E-01	1.698E-01	8.386E-02	1.698E-01
AC-228	7.763E-01	1.635E-01	5.971E-02	1.635E-01
PA-234M	2.093E-01	2.686E+00	2.108E+00	2.686E+00
TH-234	1.114E+00	3.980E-01	1.920E-01	3.980E-01
U-235	2.437E-01	1.642E-01	8.792E-02	1.642E-01
NP-237	4.937E-01	1.518E-01	8.695E-02	1.518E-01
AM-243	1.258E-01	4.170E-02	1.870E-02	4.170E-02
AM-246	6.973E-02	8.508E-02	6.081E-02	8.508E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.401E-02	2.416E-02	2.028E-02	2.416E-02	NOT IDENT.
RH-101	1.596E-02	1.892E-02	1.685E-02	1.892E-02	NOT IDENT.
SB-125	-2.417E-02	5.424E-02	4.437E-02	5.424E-02	NOT IDENT.
EU-155	-5.948E-03	5.669E-02	4.717E-02	5.669E-02	NOT IDENT.
PO-209	3.622E+00	4.024E+00	3.665E+00	4.024E+00	NOT IDENT.
BI-211	4.407E-01	5.547E-01	5.019E-01	5.547E-01	NOT IDENT.
PA-233	3.457E-02	3.908E-02	3.292E-02	3.908E-02	NOT IDENT.
NP-236	-1.269E-03	3.197E-02	2.578E-02	3.197E-02	NOT IDENT.
NP-239	-6.925E-02	1.262E-01	1.064E-01	1.262E-01	NOT IDENT.
AM-241	8.132E-03	7.644E-02	5.331E-02	7.644E-02	NOT IDENT.
CM-243	2.785E-03	5.187E-02	4.344E-02	5.187E-02	NOT IDENT.
CF-249	-1.958E-02	2.328E-02	1.872E-02	2.328E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	378.3506
63.29	443.0301
74.66	402.7031
74.81	402.7622
74.81	402.7622
77.11	403.6662
77.11	403.6662
86.48	381.9777
87.30	382.2603
87.30	382.2603
92.58	384.0504
98.44	360.7154
103.76	375.7228
105.31	368.7143
129.07	339.5147
143.76	326.4979
198.00	307.2181
209.25	315.5053
228.18	299.2373
238.63	247.8876
242.00	248.2983
269.46	218.2565
270.25	229.0168
277.36	219.8277
295.22	192.9781
300.09	176.6691
312.17	178.7745
338.32	207.6077
351.93	153.1248
387.59	174.9560
409.46	140.4647
427.87	142.3657
463.00	135.9253
510.77	110.1779
583.19	96.7505
609.31	87.9139
661.66	91.2816
727.33	69.8594
763.13	62.9060
768.36	47.2360
785.37	66.3896
794.95	43.2475
806.17	49.2333
831.80	54.0399
860.56	48.7532
896.60	48.1808
911.20	52.1175
934.06	39.9851
964.77	62.4007
968.97	67.1104
1001.03	57.8845
1078.86	46.0113
1120.29	53.2639
1155.19	31.7591
1173.23	33.6682
1238.11	53.3494
1280.96	44.6034
1332.51	54.1732
1377.67	36.0282
1401.50	25.8291
1407.98	25.8545
1460.80	27.1024
1509.23	27.2949
1588.20	25.4795
1620.50	20.2617
1729.60	14.0680
1764.49	34.2429

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701034

Total Uranium Activity	1.1274E-01	ug/g
Total Uranium Counting Unc.	7.5986E-02	ug/g
Total Uranium Tpu	7.5986E-08	ug/g
Total Uranium Mda	4.0683E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:43:15.03

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701035.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:42:44
Sample ID        : G198701035           Sample quantity  : 1.39700E+02 GRAM
Detector name    : GAM16                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.63  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.26*	74	589	1.13	92.74	87	13	5.14E-03	71.0	
2	0	59.86	53	375	1.37	119.93	117	7	3.69E-03	61.8	
3	0	63.40*	33	513	0.78	127.02	124	8	2.30E-03	130.0	
4	3	74.81*	392	662	1.68	149.83	143	16	2.72E-02	14.7	4.81E+00
5	3	77.14*	600	398	1.07	154.48	143	16	4.17E-02	7.3	
6	2	84.13*	111	555	1.48	168.47	162	31	7.69E-03	40.3	1.85E+00
7	2	87.35*	278	533	1.50	174.90	162	31	1.93E-02	16.5	
8	2	89.83	170	396	1.09	179.87	162	31	1.18E-02	21.1	
9	2	92.75*	311	430	1.39	185.70	162	31	2.16E-02	14.7	
10	0	105.37	87	320	1.15	210.95	208	7	6.07E-03	35.5	
11	0	128.96	135	446	1.08	258.13	254	10	9.37E-03	30.4	
12	0	143.62*	63	346	0.95	287.45	284	8	4.40E-03	55.7	
13	0	154.46	49	361	1.70	309.12	306	8	3.44E-03	68.0	
14	0	185.88*	248	373	1.37	371.97	366	11	1.73E-02	17.8	
15	0	205.30*	16	273	1.05	410.81	408	8	1.10E-03	196.3	
16	0	210.02	195	400	1.56	420.24	415	13	1.36E-02	22.3	
17	0	225.65	41	340	0.98	451.52	447	10	2.86E-03	85.4	
18	4	238.64*	1249	203	1.04	477.49	470	18	8.67E-02	3.6	1.62E+00
19	4	241.68	442	189	1.99	483.58	470	18	3.07E-02	7.6	
20	0	269.92	174	244	1.52	540.06	535	11	1.21E-02	18.9	
21	0	276.75	50	271	0.73	553.72	551	11	3.48E-03	65.3	
22	2	295.21*	503	167	1.55	590.65	585	31	3.49E-02	6.6	3.22E+00
23	2	299.87	146	204	1.84	599.96	585	31	1.01E-02	20.7	
24	0	328.48	31	249	0.99	657.18	651	10	2.14E-03	97.8	
25	0	338.28	275	174	1.40	676.79	673	9	1.91E-02	10.5	
26	0	351.85*	786	178	1.20	703.94	697	12	5.46E-02	5.3	
27	0	356.04	44	142	1.50	712.32	710	9	3.04E-03	51.3	
28	0	384.66	32	211	0.58	769.56	763	13	2.23E-03	95.5	
29	0	409.67	29	89	1.10	819.59	816	6	1.99E-03	56.0	
30	0	447.39	37	107	1.50	895.05	891	9	2.59E-03	52.3	
31	0	462.84	98	113	1.44	925.95	922	9	6.81E-03	22.0	
32	0	510.93*	100	210	1.86	1022.14	1014	18	6.93E-03	43.1	
33	0	583.20*	372	155	1.31	1166.71	1161	12	2.58E-02	8.9	
34	0	604.38	22	95	1.20	1209.09	1204	10	1.50E-03	88.0	
35	4	609.28*	560	64	1.51	1218.90	1213	35	3.89E-02	5.2	1.77E+00
36	4	615.64*	31	89	2.55	1231.62	1213	35	2.18E-03	77.6	
37	0	661.53	304	93	1.40	1323.41	1315	14	2.11E-02	8.8	
38	0	665.73	34	58	1.55	1331.82	1328	9	2.33E-03	44.0	

Sample ID : G198701035 Acquisition date : 14-DEC-2007 08:42:44

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	727.28*	104	102	1.01	1454.95	1448	15	7.25E-03	24.6	
40	0	749.14	14	46	1.24	1498.70	1493	8	9.64E-04	88.9	
41	0	754.57	38	63	3.26	1509.56	1505	11	2.65E-03	43.5	
42	0	769.29	47	145	0.68	1539.02	1532	16	3.27E-03	58.8	
43	0	795.10	48	50	1.21	1590.65	1586	9	3.30E-03	30.8	
44	0	806.68	33	68	3.91	1613.82	1606	14	2.27E-03	57.0	
45	0	861.02	61	73	1.39	1722.55	1716	12	4.21E-03	31.3	
46	0	911.04*	272	66	1.70	1822.61	1817	13	1.89E-02	9.3	
47	0	934.49	17	76	4.70	1869.54	1859	15	1.17E-03	114.6	
48	6	964.68	38	72	2.44	1929.96	1925	19	2.64E-03	42.7	2.85E+00
49	6	968.79	153	45	1.84	1938.17	1925	19	1.07E-02	12.4	
50	0	1002.94*	12	71	0.51	2006.50	1999	14	8.64E-04	159.9	
51	0	1119.90*	113	69	1.48	2240.54	2233	16	7.83E-03	19.6	
52	0	1157.21	46	82	6.18	2315.22	2304	22	3.19E-03	52.6	
53	0	1230.81	27	61	2.81	2462.49	2457	14	1.90E-03	63.0	
54	0	1238.48*	33	51	1.42	2477.85	2470	12	2.29E-03	51.4	
55	0	1272.57	18	39	1.45	2546.07	2538	14	1.25E-03	76.8	
56	0	1370.21	4	29	2.17	2741.48	2732	11	2.90E-04	249.2	
57	0	1377.89*	32	41	0.80	2756.85	2745	16	2.20E-03	49.8	
58	0	1400.78	19	14	1.69	2802.67	2798	10	1.32E-03	44.3	
59	0	1416.45	31	24	8.17	2834.03	2822	24	2.15E-03	45.5	
60	0	1433.38	21	22	4.28	2867.92	2859	15	1.44E-03	54.6	
61	0	1460.28*	568	11	2.04	2921.75	2915	15	3.95E-02	4.6	
62	0	1543.04	19	21	3.22	3087.40	3077	17	1.29E-03	61.6	
63	0	1557.85	10	19	3.36	3117.04	3106	14	6.90E-04	101.9	
64	0	1672.85	15	11	0.64	3347.23	3340	15	1.01E-03	56.7	
65	0	1730.08	26	17	1.68	3461.79	3453	18	1.83E-03	42.3	
66	0	1764.02*	100	18	1.77	3529.75	3521	18	6.96E-03	14.9	
67	0	1805.85	8	12	1.40	3613.48	3606	11	5.23E-04	101.0	
68	0	1842.48	12	23	5.86	3686.82	3672	20	8.08E-04	108.8	
69	0	1847.11	32	8	2.41	3696.08	3691	11	2.20E-03	25.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701035       *
* Acquisition date : 14-DEC-2007 08:42:44 Detector SN#    :                 *
* Detector ID      : GAM16                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.63     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701035           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3970E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  1-OCT-2007 14:23:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.466E+00	5.866E-01	2.632E-01	0.000E+00
CS-137	1.842E-01	3.524E-02	1.624E-02	0.000E+00
EU-155	7.295E-02	5.097E-02	8.268E-02	0.000E+00
TL-208	2.028E-01	3.827E-02	3.034E-02	0.000E+00
BI-212	4.933E-01	2.410E-01	2.097E-01	0.000E+00
PB-212	6.706E-01	5.977E-02	4.409E-02	0.000E+00
BI-214	5.810E-01	7.382E-02	4.509E-02	0.000E+00
PB-214	6.437E-01	7.419E-02	4.748E-02	0.000E+00
RA-223	3.218E-01	1.206E-01	1.374E-01	0.000E+00
AC-228	7.175E-01	1.432E-01	1.066E-01	0.000E+00
PA-234M	1.100E+00	3.448E+00	3.518E+00	0.000E+00
TH-234	1.036E+00	3.080E-01	3.551E-01	0.000E+00
U-235	1.022E-01	1.118E-01	1.633E-01	0.000E+00
NP-237	4.206E-01	1.395E-01	1.617E-01	0.000E+00
AM-241	4.926E-02	5.977E-02	9.465E-02	0.000E+00
AM-243	1.262E-01	3.715E-02	3.666E-02	0.000E+00
CM-243	6.562E-02	4.585E-02	7.628E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	1.293E-02	2.061E-02	3.649E-02	0.000E+00	NOT IDENT.
RH-101	-9.663E-03	1.730E-02	2.767E-02	0.000E+00	NOT IDENT.
SB-125	3.410E-02	4.362E-02	7.896E-02	0.000E+00	NOT IDENT.
PO-209	8.617E-01	3.286E+00	5.778E+00	0.000E+00	NOT IDENT.
BI-211	1.786E-02	4.813E-01	8.364E-01	0.000E+00	NOT IDENT.
PA-233	1.393E-02	2.832E-02	5.016E-02	0.000E+00	NOT IDENT.
NP-236	3.836E-02	3.029E-02	4.866E-02	0.000E+00	NOT IDENT.
NP-239	5.375E-03	1.208E-01	1.808E-01	0.000E+00	NOT IDENT.
AM-246	-2.880E-02	5.772E-02	9.322E-02	0.000E+00	NOT IDENT.
CF-249	7.757E-03	2.019E-02	3.157E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 12:43:15.99

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701035.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 08:42:44
Sample ID        : G198701035           Sample quantity  : 1.39700E+02 GRAM
Detector name    : GAM16                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.63  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	568	10.66*	1.310E+00	5.466E+00	5.466E+00	10.95
CS-137	661.66	304	85.10*	2.617E+00	1.833E-01	1.842E-01	19.52
EU-155	105.31	87	21.20*	7.818E+00	7.083E-02	7.295E-02	71.30
TL-208	277.36	50	6.31	5.209E+00	2.048E-01	2.048E-01	130.66
	510.77	100	22.60	3.250E+00	1.824E-01	1.824E-01	86.41
	583.19	372	84.50*	2.913E+00	2.028E-01	2.028E-01	19.26
	763.13	------	1.81	2.311E+00	------	Line Not Found	------
	860.56	61	12.42	2.076E+00	3.156E-01	3.156E-01	63.14
BI-212	727.33	104	11.80*	2.411E+00	4.933E-01	4.933E-01	49.85
	785.37	------	1.10	2.253E+00	------	Line Not Found	------
	1620.50	------	1.49	1.212E+00	------	Line Not Found	------
PB-212	74.81	392	10.40	6.124E+00	8.273E-01	8.273E-01	30.05
	77.11	600	17.50	6.365E+00	7.242E-01	7.242E-01	16.08
	87.30	278	7.81	7.172E+00	6.677E-01	6.677E-01	33.84
	238.63	1249	43.30*	5.778E+00	6.706E-01	6.706E-01	9.09
	300.09	146	3.28	4.914E+00	1.214E+00	1.214E+00	41.79
BI-214	609.31	560	46.10*	2.808E+00	5.809E-01	5.810E-01	12.97
	768.36	47	4.94	2.295E+00	5.585E-01	5.585E-01	117.94
	806.17	33	1.22	2.200E+00	1.634E+00	1.634E+00	114.29
	934.06	17	3.03	1.929E+00	3.883E-01	3.883E-01	229.26
	1120.29	113	15.10	1.640E+00	6.122E-01	6.122E-01	39.61
	1155.19	------	1.63	1.595E+00	------	Line Not Found	------
	1238.11	33	5.79	1.501E+00	5.096E-01	5.097E-01	102.89
	1280.96	------	1.43	1.458E+00	------	Line Not Found	------
	1377.67	32	4.00	1.372E+00	7.745E-01	7.746E-01	99.85
	1401.50	19	1.27	1.354E+00	1.482E+00	1.482E+00	88.73
	1407.98	------	2.15	1.348E+00	------	Line Not Found	------
	1509.23	------	2.11	1.277E+00	------	Line Not Found	------
	1729.60	26	2.92	1.160E+00	1.043E+00	1.043E+00	84.87
	1764.49	100	15.40	1.147E+00	7.621E-01	7.622E-01	30.30
PB-214	74.81	392	6.44	6.124E+00	1.336E+00	1.336E+00	30.05
	77.11	600	10.80	6.365E+00	1.174E+00	1.174E+00	16.08

Sample ID : G198701035 Acquisition date : 14-DEC-2007 08:42:44

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	278	4.84	7.172E+00	1.077E+00	1.078E+00	33.84
	242.00	442	7.43	5.729E+00	1.396E+00	1.397E+00	16.14
	295.22	503	19.30	4.971E+00	7.042E-01	7.043E-01	14.38
	351.93	786	37.60*	4.361E+00	6.437E-01	6.437E-01	11.76
RA-223	269.46	174	13.70*	5.303E+00	3.218E-01	3.218E-01	38.23
AC-228	129.07	135	2.42	7.822E+00	9.579E-01	9.579E-01	61.23
	209.25	195	3.89	6.283E+00	1.074E+00	1.074E+00	45.02
	270.25	174	3.46	5.303E+00	1.274E+00	1.274E+00	38.23
	338.32	275	11.27	4.493E+00	7.306E-01	7.306E-01	21.64
	409.46	29	1.92	3.878E+00	5.172E-01	5.172E-01	112.09
	463.00	98	4.40	3.521E+00	8.500E-01	8.500E-01	44.34
	794.95	48	4.25	2.229E+00	6.742E-01	6.742E-01	62.22
	911.20	272	25.80*	1.973E+00	7.175E-01	7.175E-01	20.37
	964.77	38	4.99	1.874E+00	5.463E-01	5.463E-01	85.69
	968.97	153	15.80	1.867E+00	6.990E-01	6.990E-01	25.98
	1588.20	------	3.22	1.230E+00	------ Line Not Found		------
PA-234M	1001.03	12	0.84*	1.810E+00	1.100E+00	1.100E+00	319.81
TH-234	63.29	33	4.80	4.612E+00	2.011E-01	2.011E-01	260.12
	92.58	311	5.41*	7.454E+00	1.037E+00	1.036E+00	30.32
U-235	143.76	63	10.96*	7.608E+00	1.022E-01	1.022E-01	111.62
NP-237	86.48	278	12.40*	7.172E+00	4.206E-01	4.206E-01	33.84
AM-241	59.54	53	35.90*	4.040E+00	4.924E-02	4.926E-02	123.83
AM-243	74.66	392	68.20*	6.124E+00	1.262E-01	1.262E-01	30.05
CM-243	103.76	87	23.00*	7.818E+00	6.529E-02	6.562E-02	71.30

Flag: "*" = Keyline

Sample ID : G198701035 Acquisition date : 14-DEC-2007 08:42:44

Total number of lines in spectrum 69
Number of unidentified lines 28
Number of lines tentatively identified by NID 41 59.42%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.466E+00	5.466E+00	0.599E+00	10.95	
CS-137	9.47E+08S	1.00	1.833E-01	1.842E-01	0.360E-01	19.52	
EU-155	1.57E+08S	1.03	7.083E-02	7.295E-02	5.201E-02	71.30	
TL-208	4.43E+17S	1.00	2.028E-01	2.028E-01	0.390E-01	19.26	
BI-212	4.43E+17S	1.00	4.933E-01	4.933E-01	2.459E-01	49.85	
PB-212	4.43E+17S	1.00	6.706E-01	6.706E-01	0.610E-01	9.09	
BI-214	5.05E+10S	1.00	5.809E-01	5.810E-01	0.753E-01	12.97	
PB-214	5.05E+10S	1.00	6.437E-01	6.437E-01	0.757E-01	11.76	
RA-223	1.04E+12S	1.00	3.218E-01	3.218E-01	1.230E-01	38.23	
AC-228	4.43E+17S	1.00	7.175E-01	7.175E-01	1.462E-01	20.37	
PA-234M	1.41E+17S	1.00	1.100E+00	1.100E+00	3.518E+00	319.81	
TH-234	1.41E+17S	1.00	1.037E+00	1.036E+00	0.314E+00	30.32	
U-235	2.22E+16S	1.00	1.022E-01	1.022E-01	1.141E-01	111.62	
NP-237	6.75E+13S	1.00	4.206E-01	4.206E-01	1.423E-01	33.84	
AM-241	1.36E+10S	1.00	4.924E-02	4.926E-02	6.099E-02	123.83	
AM-243	2.33E+11S	1.00	1.262E-01	1.262E-01	0.379E-01	30.05	
CM-243	8.99E+08S	1.01	6.529E-02	6.562E-02	4.679E-02	71.30	
			---	---			
	Total Activity :		1.225E+01	1.225E+01			

Grand Total Activity : 1.225E+01 1.225E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701035 Acquisition date : 14-DEC-2007 08:42:44

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.26	74	589	1.13	92.74	87	13	5.14E-03	****	1.71E+00	
2	84.13	111	555	1.48	168.47	162	31	7.69E-03	80.5	6.96E+00	
2	89.83	170	396	1.09	179.87	162	31	1.18E-02	42.2	7.31E+00	
0	154.46	49	361	1.70	309.12	306	8	3.44E-03	****	7.41E+00	
0	185.88	248	373	1.37	371.97	366	11	1.73E-02	35.6	6.76E+00	
0	205.30	16	273	1.05	410.81	408	8	1.10E-03	****	6.37E+00	
0	225.65	41	340	0.98	451.52	447	10	2.86E-03	****	6.00E+00	
0	328.48	31	249	0.99	657.18	651	10	2.14E-03	****	4.59E+00	
0	356.04	44	142	1.50	712.32	710	9	3.04E-03	****	4.32E+00	
0	384.66	32	211	0.58	769.56	763	13	2.23E-03	****	4.07E+00	
0	447.39	37	107	1.50	895.05	891	9	2.59E-03	****	3.62E+00	
0	604.38	22	95	1.20	1209.09	1204	10	1.50E-03	****	2.83E+00	
4	615.64	31	89	2.55	1231.62	1213	35	2.18E-03	****	2.78E+00	
0	665.73	34	58	1.55	1331.82	1328	9	2.33E-03	88.1	2.60E+00	
0	749.14	14	46	1.24	1498.70	1493	8	9.64E-04	****	2.35E+00	
0	754.57	38	63	3.26	1509.56	1505	11	2.65E-03	87.0	2.33E+00	
0	1157.21	46	82	6.18	2315.22	2304	22	3.19E-03	****	1.59E+00	
0	1230.81	27	61	2.81	2462.49	2457	14	1.90E-03	****	1.51E+00	
0	1272.57	18	39	1.45	2546.07	2538	14	1.25E-03	****	1.47E+00	
0	1370.21	4	29	2.17	2741.48	2732	11	2.90E-04	****	1.38E+00	
0	1416.45	31	24	8.17	2834.03	2822	24	2.15E-03	91.0	1.34E+00	
0	1433.38	21	22	4.28	2867.92	2859	15	1.44E-03	****	1.33E+00	
0	1543.04	19	21	3.22	3087.40	3077	17	1.29E-03	****	1.26E+00	
0	1557.85	10	19	3.36	3117.04	3106	14	6.90E-04	****	1.25E+00	
0	1672.85	15	11	0.64	3347.23	3340	15	1.01E-03	****	1.19E+00	
0	1805.85	8	12	1.40	3613.48	3606	11	5.23E-04	****	1.13E+00	
0	1842.48	12	23	5.86	3686.82	3672	20	8.08E-04	****	1.12E+00	
0	1847.11	32	8	2.41	3696.08	3691	11	2.20E-03	50.1	1.12E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701035            *
* Acquisition date : 14-DEC-2007 08:42:44 Detector SN#    :                 *
* Detector ID      : GAM16                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.63     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701035           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.3970E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  1-OCT-2007 14:23:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.466E+00	5.866E-01	1.317E-01	5.866E-01
CS-137	1.842E-01	3.524E-02	8.126E-03	3.524E-02
EU-155	7.295E-02	5.097E-02	4.137E-02	5.097E-02
TL-208	2.028E-01	3.827E-02	1.518E-02	3.827E-02
BI-212	4.933E-01	2.410E-01	1.049E-01	2.410E-01
PB-212	6.706E-01	5.977E-02	2.206E-02	5.977E-02
BI-214	5.810E-01	7.382E-02	2.256E-02	7.382E-02
PB-214	6.437E-01	7.419E-02	2.376E-02	7.419E-02
RA-223	3.218E-01	1.206E-01	6.876E-02	1.206E-01
AC-228	7.175E-01	1.432E-01	5.331E-02	1.432E-01
PA-234M	1.100E+00	3.448E+00	1.760E+00	3.448E+00
TH-234	1.036E+00	3.080E-01	1.777E-01	3.080E-01
U-235	1.022E-01	1.118E-01	8.171E-02	1.118E-01
NP-237	4.206E-01	1.395E-01	8.089E-02	1.395E-01
AM-241	4.926E-02	5.977E-02	4.735E-02	5.977E-02
AM-243	1.262E-01	3.715E-02	1.834E-02	3.715E-02
CM-243	6.562E-02	4.585E-02	3.816E-02	4.585E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.293E-02	2.061E-02	1.826E-02	2.061E-02	NOT IDENT.
RH-101	-9.663E-03	1.730E-02	1.385E-02	1.730E-02	NOT IDENT.
SB-125	3.410E-02	4.362E-02	3.950E-02	4.362E-02	NOT IDENT.
PO-209	8.617E-01	3.286E+00	2.890E+00	3.286E+00	NOT IDENT.
BI-211	1.786E-02	4.813E-01	4.184E-01	4.813E-01	NOT IDENT.
PA-233	1.393E-02	2.832E-02	2.509E-02	2.832E-02	NOT IDENT.
NP-236	3.836E-02	3.029E-02	2.435E-02	3.029E-02	NOT IDENT.
NP-239	5.375E-03	1.208E-01	9.045E-02	1.208E-01	NOT IDENT.
AM-246	-2.880E-02	5.772E-02	4.664E-02	5.772E-02	NOT IDENT.
CF-249	7.757E-03	2.019E-02	1.580E-02	2.019E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
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ENERGY	MDA COUNTS
59.54	410.7898
63.29	487.4986
74.66	526.6697
74.81	526.7781
74.81	526.7781
77.11	528.4333
77.11	528.4333
86.48	462.5891
87.30	463.0656
87.30	463.0656
92.58	466.0865
98.44	355.0073
103.76	422.9758
105.31	405.0770
129.07	379.0882
143.76	429.2901
198.00	358.3484
209.25	232.2834
228.18	313.8596
238.63	287.5400
242.00	260.4634
269.46	237.2805
270.25	237.3969
277.36	242.9176
295.22	213.6630
300.09	214.2596
312.17	184.6113
338.32	203.8903
351.93	145.3276
387.59	155.8685
409.46	137.8732
427.87	141.9490
463.00	150.0592
510.77	125.8400
583.19	136.5665
609.31	83.5391
661.66	31.8875
727.33	87.9135
763.13	85.9448
768.36	99.9956
785.37	75.4636
794.95	78.4424
806.17	67.5850
831.80	85.7933
860.56	62.9774
896.60	67.3844
911.20	73.3593
934.06	70.6444
964.77	67.8848
968.97	43.0933
1001.03	71.8351
1078.86	58.5631
1120.29	53.1057
1155.19	67.6516
1173.23	63.8639
1238.11	68.7098
1280.96	48.6346
1332.51	41.8994
1377.67	30.7947
1401.50	36.0890
1407.98	22.3176
1460.80	34.3424
1509.23	27.0660
1588.20	45.1624
1620.50	12.2990
1729.60	20.2273
1764.49	23.2458

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701035

Total Uranium Activity	4.7282E-02	ug/g
Total Uranium Counting Unc.	5.1722E-02	ug/g
Total Uranium Tpu	5.1722E-08	ug/g
Total Uranium Mda	3.7809E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 13:35:22.67

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701036.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 09:34:28
Sample ID        : G198701036           Sample quantity  : 1.28130E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:23.69  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.51	113	323	1.43	92.13	88	9	7.83E-03	30.2	
2	0	63.53	148	510	1.37	126.11	121	11	1.03E-02	30.7	
3	3	74.95	672	614	1.86	148.92	142	16	4.67E-02	8.6	5.23E+00
4	3	77.28*	786	450	1.26	153.56	142	16	5.46E-02	6.3	
5	3	87.34	274	429	1.35	173.67	170	20	1.90E-02	13.9	1.88E+00
6	3	90.01	188	414	1.42	179.00	170	20	1.30E-02	21.7	
7	3	92.99*	314	342	1.77	184.96	170	20	2.18E-02	13.3	
8	0	99.43	86	449	3.40	197.81	193	12	5.98E-03	50.6	
9	0	115.07	38	264	1.45	229.06	227	7	2.64E-03	72.6	
10	0	129.20	201	430	3.66	257.27	250	14	1.40E-02	23.0	
11	0	179.94	19	250	1.41	358.61	357	8	1.33E-03	145.7	
12	0	186.15*	139	389	1.74	371.03	366	11	9.64E-03	30.4	
13	0	209.25	118	265	2.47	417.17	413	10	8.19E-03	27.4	
14	1	238.61*	1024	207	1.58	475.82	469	20	7.11E-02	4.2	1.54E+00
15	1	241.55	237	213	1.74	481.68	469	20	1.65E-02	17.3	
16	8	270.33	102	220	1.85	539.18	534	16	7.06E-03	29.4	1.75E+00
17	8	274.40	28	96	2.29	547.33	534	16	1.91E-03	62.6	
18	0	277.73	64	129	2.41	553.98	550	8	4.48E-03	32.9	
19	0	295.09*	308	170	1.47	588.65	583	11	2.14E-02	10.7	
20	0	300.02	54	170	0.81	598.51	595	9	3.78E-03	45.4	
21	0	313.63	52	92	2.20	625.69	623	8	3.63E-03	34.9	
22	0	328.05	55	293	4.28	654.52	648	15	3.79E-03	69.7	
23	0	338.36	181	239	1.34	675.10	669	14	1.26E-02	19.6	
24	0	352.03*	504	208	1.52	702.42	697	13	3.50E-02	7.7	
25	0	362.84	36	187	6.26	724.02	721	15	2.49E-03	84.3	
26	0	410.29	25	148	1.44	818.84	811	12	1.72E-03	100.5	
27	0	463.84	43	115	1.22	925.86	923	11	3.01E-03	52.6	
28	0	510.68*	61	101	1.94	1019.46	1012	14	4.26E-03	49.9	
29	0	583.03*	243	101	1.66	1164.08	1158	15	1.69E-02	11.3	
30	0	609.24*	403	71	1.51	1216.48	1211	14	2.80E-02	7.0	
31	0	661.94	102	111	1.31	1321.83	1316	14	7.10E-03	23.8	
32	0	696.62	15	51	1.21	1391.16	1385	9	1.05E-03	92.0	
33	0	726.49	76	64	2.88	1450.89	1442	16	5.28E-03	26.2	
34	0	795.42	20	48	1.82	1588.73	1581	12	1.41E-03	71.7	
35	0	811.11	20	38	4.25	1620.10	1611	13	1.39E-03	68.0	
36	0	829.37*	16	42	2.23	1656.61	1651	11	1.08E-03	90.5	
37	0	857.12	12	27	0.91	1712.12	1706	9	8.48E-04	83.8	
38	0	861.05	56	27	2.19	1719.97	1715	13	3.87E-03	23.2	

Sample ID : G198701036 Acquisition date : 14-DEC-2007 09:34:28

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	911.49	160	52	1.74	1820.86	1811	17	1.11E-02	13.0	
40	0	934.32	29	30	0.79	1866.52	1860	11	1.99E-03	42.7	
41	3	964.01	42	46	2.64	1925.90	1918	24	2.89E-03	41.1	2.64E+00
42	3	969.10	118	32	2.00	1936.08	1918	24	8.21E-03	12.9	
43	0	1106.12	32	66	9.74	2210.20	2192	29	2.25E-03	73.6	
44	0	1120.78*	54	58	1.73	2239.53	2233	17	3.73E-03	37.8	
45	0	1246.15	43	33	3.01	2490.40	2482	21	3.01E-03	35.8	
46	0	1344.87	14	33	5.31	2687.99	2677	17	9.48E-04	101.4	
47	0	1461.29*	214	50	2.54	2921.05	2909	19	1.48E-02	10.7	
48	0	1545.12	10	10	3.22	3088.90	3083	10	6.94E-04	67.1	
49	0	1554.94	8	14	0.84	3108.58	3100	11	5.84E-04	92.0	
50	0	1661.66	16	14	2.70	3322.29	3314	14	1.13E-03	54.6	
51	0	1666.45	7	4	1.30	3331.89	3327	8	5.05E-04	59.9	
52	0	1686.06	16	14	5.50	3371.16	3364	15	1.13E-03	57.1	
53	0	1717.62	15	6	4.47	3434.37	3428	12	1.07E-03	40.4	
54	0	1730.26	26	7	3.40	3459.69	3454	13	1.77E-03	28.6	
55	0	1750.52	8	13	0.86	3500.26	3494	12	5.56E-04	94.4	
56	0	1764.71	47	12	2.32	3528.70	3523	12	3.26E-03	20.7	
57	0	1879.91	9	9	0.62	3759.49	3753	13	6.11E-04	80.1	
58	0	1949.03	18	17	0.60	3897.97	3891	16	1.26E-03	55.0	
59	0	2002.89	7	8	3.40	4005.91	4000	10	5.12E-04	78.9	
60	0	2043.40	7	4	1.11	4087.10	4085	6	4.89E-04	59.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701036       *
* Acquisition date : 14-DEC-2007 09:34:28 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:23.69     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701036           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2813E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.951E+00	8.591E-01	4.647E-01	0.000E+00
CS-137	1.078E-01	5.105E-02	4.614E-02	0.000E+00
TL-208	2.248E-01	5.230E-02	3.791E-02	0.000E+00
BI-212	6.337E-01	3.290E-01	3.065E-01	0.000E+00
PB-212	7.361E-01	7.498E-02	5.267E-02	0.000E+00
BI-214	7.152E-01	1.119E-01	8.187E-02	0.000E+00
PB-214	6.133E-01	9.788E-02	7.247E-02	0.000E+00
RA-223	2.597E-01	1.504E-01	1.826E-01	0.000E+00
AC-228	7.686E-01	2.017E-01	1.494E-01	0.000E+00
PA-233	5.492E-02	3.766E-02	6.767E-02	0.000E+00
TH-234	1.008E+00	2.735E-01	3.416E-01	0.000E+00
NP-236	4.003E-02	3.979E-02	4.331E-02	0.000E+00
NP-237	3.790E-01	1.065E-01	1.553E-01	0.000E+00
AM-243	1.670E-01	3.039E-02	2.693E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	1.192E-02		3.028E-02	5.267E-02	0.000E+00	NOT IDENT.
RH-101	-1.347E-03		2.010E-02	3.290E-02	0.000E+00	NOT IDENT.
SB-125	1.546E-02		6.172E-02	1.065E-01	0.000E+00	NOT IDENT.
EU-155	1.445E-02		5.457E-02	8.276E-02	0.000E+00	NOT IDENT.
PO-209	-3.456E+00		5.440E+00	8.706E+00	0.000E+00	NOT IDENT.
BI-211	1.560E-01		8.984E-01	1.349E+00	0.000E+00	NOT IDENT.
PA-234M	2.606E+00		3.210E+00	5.826E+00	0.000E+00	NOT IDENT.
U-235	1.646E-02		1.091E-01	1.855E-01	0.000E+00	NOT IDENT.
NP-239	-5.188E-02		1.245E-01	2.146E-01	0.000E+00	NOT IDENT.
AM-241	4.356E-02		2.870E-02	4.717E-02	0.000E+00	NOT IDENT.
CM-243	1.170E-02		4.679E-02	7.099E-02	0.000E+00	NOT IDENT.
AM-246	1.993E-02		1.011E-01	1.732E-01	0.000E+00	NOT IDENT.
CF-249	1.643E-02		2.618E-02	4.628E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 13:35:23.73

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701036.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 09:34:28
Sample ID        : G198701036           Sample quantity  : 1.28130E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:23.69  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	214	10.66*	7.432E-01	3.951E+00	3.951E+00	22.19
CS-137	661.66	102	85.10*	1.641E+00	1.073E-01	1.078E-01	48.31
TL-208	277.36	64	6.31	4.074E+00	3.672E-01	3.672E-01	65.97
	510.77	61	22.60	2.160E+00	1.842E-01	1.842E-01	100.03
	583.19	243	84.50*	1.876E+00	2.248E-01	2.248E-01	23.74
	763.13	------	1.81	1.415E+00	------	Line Not Found	------
	860.56	56	12.42	1.250E+00	5.259E-01	5.259E-01	46.98
BI-212	727.33	76	11.80*	1.489E+00	6.337E-01	6.337E-01	52.98
	785.37	------	1.10	1.374E+00	------	Line Not Found	------
	1620.50	------	1.49	6.722E-01	------	Line Not Found	------
PB-212	74.81	672	10.40	8.644E+00	1.095E+00	1.095E+00	18.57
	77.11	786	17.50	8.639E+00	7.611E-01	7.611E-01	14.45
	87.30	274	7.81	8.536E+00	6.017E-01	6.017E-01	28.68
	238.63	1024	43.30*	4.708E+00	7.361E-01	7.361E-01	10.40
	300.09	54	3.28	3.774E+00	6.434E-01	6.434E-01	90.91
BI-214	609.31	403	46.10*	1.790E+00	7.152E-01	7.152E-01	15.97
	768.36	------	4.94	1.405E+00	------	Line Not Found	------
	806.17	------	1.22	1.337E+00	------	Line Not Found	------
	934.06	29	3.03	1.152E+00	1.204E+00	1.204E+00	85.61
	1120.29	54	15.10	9.615E-01	5.421E-01	5.422E-01	75.80
	1155.19	------	1.63	9.335E-01	------	Line Not Found	------
	1238.11	------	5.79	8.725E-01	------	Line Not Found	------
	1280.96	------	1.43	8.442E-01	------	Line Not Found	------
	1377.67	------	4.00	7.867E-01	------	Line Not Found	------
	1401.50	------	1.27	7.738E-01	------	Line Not Found	------
	1407.98	------	2.15	7.704E-01	------	Line Not Found	------
	1509.23	------	2.11	7.203E-01	------	Line Not Found	------
	1729.60	26	2.92	6.305E-01	2.029E+00	2.029E+00	57.45
	1764.49	47	15.40	6.184E-01	7.229E-01	7.230E-01	41.86
PB-214	74.81	672	6.44	8.644E+00	1.769E+00	1.769E+00	18.57
	77.11	786	10.80	8.639E+00	1.233E+00	1.233E+00	14.45
	87.30	274	4.84	8.536E+00	9.710E-01	9.711E-01	28.68

Sample ID : G198701036 Acquisition date : 14-DEC-2007 09:34:28

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	237	7.43	4.655E+00	1.004E+00	1.004E+00	35.13
	295.22	308	19.30	3.837E+00	6.101E-01	6.101E-01	22.08
	351.93	504	37.60*	3.204E+00	6.132E-01	6.133E-01	16.29
RA-223	269.46	102	13.70*	4.183E+00	2.597E-01	2.597E-01	59.11
AC-228	129.07	201	2.42	7.441E+00	1.638E+00	1.638E+00	46.76
	209.25	118	3.89	5.293E+00	8.395E-01	8.395E-01	55.19
	270.25	102	3.46	4.183E+00	1.028E+00	1.028E+00	59.11
	338.32	181	11.27	3.338E+00	7.040E-01	7.040E-01	39.49
	409.46	25	1.92	2.727E+00	6.944E-01	6.944E-01	201.14
	463.00	43	4.40	2.394E+00	6.035E-01	6.035E-01	105.37
	794.95	20	4.25	1.356E+00	5.159E-01	5.159E-01	143.70
	911.20	160	25.80*	1.181E+00	7.686E-01	7.686E-01	26.78
	964.77	42	4.99	1.116E+00	1.095E+00	1.095E+00	82.37
	968.97	118	15.80	1.110E+00	9.877E-01	9.877E-01	26.64
	1588.20	------	3.22	6.855E-01	------	Line Not Found	------
PA-233	312.17	52	38.60*	3.608E+00	5.492E-02	5.492E-02	69.98
TH-234	63.29	148	4.80	8.520E+00	5.293E-01	5.293E-01	61.74
	92.58	314	5.41*	8.433E+00	1.008E+00	1.008E+00	27.68
NP-236	98.44	86	38.00*	8.289E+00	4.003E-02	4.003E-02	101.43
NP-237	86.48	274	12.40*	8.536E+00	3.790E-01	3.790E-01	28.68
AM-243	74.66	672	68.20*	8.644E+00	1.670E-01	1.670E-01	18.57

Flag: "*" = Keyline

Sample ID : G198701036 Acquisition date : 14-DEC-2007 09:34:28

Total number of lines in spectrum 60
Number of unidentified lines 26
Number of lines tentatively identified by NID 34 56.67%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.951E+00	3.951E+00	0.877E+00	22.19	
CS-137	9.47E+08S	1.00	1.073E-01	1.078E-01	0.521E-01	48.31	
TL-208	4.43E+17S	1.00	2.248E-01	2.248E-01	0.534E-01	23.74	
BI-212	4.43E+17S	1.00	6.337E-01	6.337E-01	3.358E-01	52.98	
PB-212	4.43E+17S	1.00	7.361E-01	7.361E-01	0.765E-01	10.40	
BI-214	5.05E+10S	1.00	7.152E-01	7.152E-01	1.142E-01	15.97	
PB-214	5.05E+10S	1.00	6.132E-01	6.133E-01	0.999E-01	16.29	
RA-223	1.04E+12S	1.00	2.597E-01	2.597E-01	1.535E-01	59.11	
AC-228	4.43E+17S	1.00	7.686E-01	7.686E-01	2.058E-01	26.78	
PA-233	6.75E+13S	1.00	5.492E-02	5.492E-02	3.843E-02	69.98	
TH-234	1.41E+17S	1.00	1.008E+00	1.008E+00	0.279E+00	27.68	
NP-236	4.89E+12S	1.00	4.003E-02	4.003E-02	4.060E-02	101.43	
NP-237	6.75E+13S	1.00	3.790E-01	3.790E-01	1.087E-01	28.68	
AM-243	2.33E+11S	1.00	1.670E-01	1.670E-01	0.310E-01	18.57	
			---	---			
	Total Activity :		9.659E+00	9.659E+00			

Grand Total Activity : 9.659E+00 9.659E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701036 Acquisition date : 14-DEC-2007 09:34:28

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.51	113	323	1.43	92.13	88	9	7.83E-03	60.4	7.65E+00	
3	90.01	188	414	1.42	179.00	170	20	1.30E-02	43.4	8.49E+00	
0	115.07	38	264	1.45	229.06	227	7	2.64E-03	****	7.86E+00	
0	179.94	19	250	1.41	358.61	357	8	1.33E-03	****	5.99E+00	
0	186.15	139	389	1.74	371.03	366	11	9.64E-03	60.9	5.83E+00	
8	274.40	28	96	2.29	547.33	534	16	1.91E-03	****	4.12E+00	
0	328.05	55	293	4.28	654.52	648	15	3.79E-03	****	3.45E+00	
0	362.84	36	187	6.26	724.02	721	15	2.49E-03	****	3.10E+00	
0	696.62	15	51	1.21	1391.16	1385	9	1.05E-03	****	1.56E+00	
0	811.11	20	38	4.25	1620.10	1611	13	1.39E-03	****	1.33E+00	
0	829.37	16	42	2.23	1656.61	1651	11	1.08E-03	****	1.30E+00	
0	857.12	12	27	0.91	1712.12	1706	9	8.48E-04	****	1.26E+00	
0	1106.12	32	66	9.74	2210.20	2192	29	2.25E-03	****	9.74E-01	
0	1246.15	43	33	3.01	2490.40	2482	21	3.01E-03	71.7	8.67E-01	
0	1344.87	14	33	5.31	2687.99	2677	17	9.48E-04	****	8.05E-01	
0	1545.12	10	10	3.22	3088.90	3083	10	6.94E-04	****	7.04E-01	
0	1554.94	8	14	0.84	3108.58	3100	11	5.84E-04	****	7.00E-01	
0	1661.66	16	14	2.70	3322.29	3314	14	1.13E-03	****	6.56E-01	
0	1666.45	7	4	1.30	3331.89	3327	8	5.05E-04	****	6.54E-01	
0	1686.06	16	14	5.50	3371.16	3364	15	1.13E-03	****	6.47E-01	
0	1717.62	15	6	4.47	3434.37	3428	12	1.07E-03	80.7	6.35E-01	
0	1750.52	8	13	0.86	3500.26	3494	12	5.56E-04	****	6.23E-01	
0	1879.91	9	9	0.62	3759.49	3753	13	6.11E-04	****	5.81E-01	
0	1949.03	18	17	0.60	3897.97	3891	16	1.26E-03	****	5.60E-01	
0	2002.89	7	8	3.40	4005.91	4000	10	5.12E-04	****	5.45E-01	
0	2043.40	7	4	1.11	4087.10	4085	6	4.89E-04	****	5.34E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701036            *
* Acquisition date : 14-DEC-2007 09:34:28 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:23.69     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701036           Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.2813E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.951E+00	8.591E-01	2.325E-01	8.591E-01
CS-137	1.078E-01	5.105E-02	2.308E-02	5.105E-02
TL-208	2.248E-01	5.230E-02	1.897E-02	5.230E-02
BI-212	6.337E-01	3.290E-01	1.533E-01	3.290E-01
PB-212	7.361E-01	7.498E-02	2.635E-02	7.498E-02
BI-214	7.152E-01	1.119E-01	4.096E-02	1.119E-01
PB-214	6.133E-01	9.788E-02	3.626E-02	9.788E-02
RA-223	2.597E-01	1.504E-01	9.134E-02	1.504E-01
AC-228	7.686E-01	2.017E-01	7.475E-02	2.017E-01
PA-233	5.492E-02	3.766E-02	3.385E-02	3.766E-02
TH-234	1.008E+00	2.735E-01	1.709E-01	2.735E-01
NP-236	4.003E-02	3.979E-02	2.167E-02	3.979E-02
NP-237	3.790E-01	1.065E-01	7.768E-02	1.065E-01
AM-243	1.670E-01	3.039E-02	1.347E-02	3.039E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.192E-02	3.028E-02	2.635E-02	3.028E-02	NOT IDENT.
RH-101	-1.347E-03	2.010E-02	1.646E-02	2.010E-02	NOT IDENT.
SB-125	1.546E-02	6.172E-02	5.330E-02	6.172E-02	NOT IDENT.
EU-155	1.445E-02	5.457E-02	4.141E-02	5.457E-02	NOT IDENT.
PO-209	-3.456E+00	5.440E+00	4.355E+00	5.440E+00	NOT IDENT.
BI-211	1.560E-01	8.984E-01	6.750E-01	8.984E-01	NOT IDENT.
PA-234M	2.606E+00	3.210E+00	2.915E+00	3.210E+00	NOT IDENT.
U-235	1.646E-02	1.091E-01	9.283E-02	1.091E-01	NOT IDENT.
NP-239	-5.188E-02	1.245E-01	1.073E-01	1.245E-01	NOT IDENT.
AM-241	4.356E-02	2.870E-02	2.360E-02	2.870E-02	NOT IDENT.
CM-243	1.170E-02	4.679E-02	3.551E-02	4.679E-02	NOT IDENT.
AM-246	1.993E-02	1.011E-01	8.667E-02	1.011E-01	NOT IDENT.
CF-249	1.643E-02	2.618E-02	2.316E-02	2.618E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	306.1723
63.29	420.6212
74.66	496.1935
74.81	496.2730
74.81	496.2730
77.11	497.4917
77.11	497.4917
86.48	535.7651
87.30	556.5610
87.30	556.5610
92.58	482.4161
98.44	371.5534
103.76	336.0072
105.31	365.8009
129.07	344.2494
143.76	398.1313
198.00	320.9017
209.25	288.6943
228.18	279.6005
238.63	234.9542
242.00	235.3752
269.46	225.2896
270.25	210.9900
277.36	198.8965
295.22	194.1260
300.09	176.7303
312.17	184.2296
338.32	162.2803
351.93	157.2459
387.59	140.3472
409.46	140.5168
427.87	119.9536
463.00	105.5536
510.77	87.5740
583.19	75.5491
609.31	95.7086
661.66	86.4631
727.33	60.9747
763.13	80.2859
768.36	76.6082
785.37	48.4361
794.95	57.1167
806.17	58.9081
831.80	65.8524
860.56	17.4020
896.60	64.3282
911.20	44.0021
934.06	55.0316
964.77	39.5679
968.97	35.6426
1001.03	42.8583
1078.86	45.5566
1120.29	41.9866
1155.19	40.0616
1173.23	40.1949
1238.11	46.4794
1280.96	29.4185
1332.51	31.7969
1377.67	23.4932
1401.50	20.3684
1407.98	34.3411
1460.80	29.2192
1509.23	23.3651
1588.20	27.4282
1620.50	22.8064
1729.60	16.8896
1764.49	19.3952

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701036

Total Uranium Activity	7.6156E-03	ug/g
Total Uranium Counting Unc.	5.0472E-02	ug/g
Total Uranium Tpu	5.0472E-08	ug/g
Total Uranium Mda	4.2951E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 14:21:48.19

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473843.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 14-DEC-2007 10:21:22
Sample ID        : G1201473843          Sample quantity  : 1.56220E+02 GRAM
Detector name    : GAM01                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.01  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.57	17	108	1.14	107.19	104	6	1.20E-03	98.7	
2	0	92.69*	5	264	1.08	185.46	179	12	3.34E-04	766.0	
3	0	155.24*	37	191	0.78	310.58	306	10	2.55E-03	79.4	
4	0	311.84	35	84	1.42	623.87	620	9	2.46E-03	49.4	
5	0	338.66	51	60	1.25	677.52	674	9	3.54E-03	30.6	
6	0	419.31	19	41	1.05	838.85	834	9	1.29E-03	66.3	
7	0	427.91	41	39	4.10	856.05	851	11	2.86E-03	33.7	
8	0	570.80	16	56	4.24	1141.90	1133	13	1.14E-03	98.9	
9	0	609.14*	13	77	4.04	1218.58	1211	16	8.92E-04	171.0	
10	0	654.05	16	21	2.89	1308.41	1304	9	1.13E-03	55.9	
11	0	755.93	23	37	3.30	1512.21	1505	16	1.62E-03	63.6	
12	0	807.44	43	56	4.44	1615.24	1596	29	2.95E-03	53.6	
13	0	828.63	11	26	2.08	1657.62	1647	13	7.57E-04	101.1	
14	7	961.58*	16	10	3.64	1923.56	1918	16	1.13E-03	57.5	8.87E-01
15	7	964.97	18	5	1.65	1930.34	1918	16	1.23E-03	34.9	
16	0	1119.74*	17	25	0.65	2239.89	2233	18	1.17E-03	80.3	
17	0	1202.03	21	7	2.45	2404.46	2397	14	1.49E-03	33.9	
18	0	1394.42	9	11	1.46	2789.25	2783	9	6.20E-04	75.4	
19	0	1436.51	6	4	0.65	2873.42	2869	8	4.17E-04	70.7	
20	0	1501.74	8	10	0.62	3003.88	2997	10	5.56E-04	82.0	
21	0	1528.26	8	7	0.49	3056.91	3050	12	5.79E-04	68.9	
22	0	1602.97	13	4	1.37	3206.32	3198	15	9.35E-04	41.4	
23	0	1733.52	9	2	0.69	3467.39	3463	9	6.03E-04	46.2	
24	0	1954.36	14	0	4.65	3909.00	3903	14	9.72E-04	26.7	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473843      *
* Acquisition date : 14-DEC-2007 10:21:22 Detector SN#    :                 *
* Detector ID      : GAM01                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.01     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473843          Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5622E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-MAR-2007 03:44:30 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
SB-125	5.468E-02	3.628E-02	5.496E-02	0.000E+00
PA-233	2.787E-02	2.706E-02	4.078E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
K-40	-1.041E-01		1.981E-01	3.466E-01	0.000E+00	NOT IDENT.
CO-60	7.343E-03		1.266E-02	2.301E-02	0.000E+00	NOT IDENT.
RH-101	-9.297E-03		1.352E-02	2.052E-02	0.000E+00	NOT IDENT.
CS-137	-1.488E-02		1.748E-02	2.238E-02	0.000E+00	NOT IDENT.
EU-155	-8.793E-03		3.209E-02	5.879E-02	0.000E+00	NOT IDENT.
TL-208	-6.573E-03		1.698E-02	2.457E-02	0.000E+00	NOT IDENT.
PO-209	2.629E-01		2.778E+00	4.800E+00	0.000E+00	NOT IDENT.
BI-211	-1.807E-02		3.776E-01	5.525E-01	0.000E+00	NOT IDENT.
BI-212	4.289E-02		9.600E-02	1.741E-01	0.000E+00	NOT IDENT.
PB-212	-9.017E-03		2.669E-02	3.991E-02	0.000E+00	NOT IDENT.
BI-214	1.474E-02		4.944E-02	5.689E-02	0.000E+00	FAIL ABUN
PB-214	-2.337E-02		3.095E-02	4.864E-02	0.000E+00	NOT IDENT.
RA-223	1.598E-02		6.261E-02	1.125E-01	0.000E+00	NOT IDENT.
AC-228	9.390E-03		5.795E-02	9.483E-02	0.000E+00	FAIL ABUN
PA-234M	2.548E+00		1.584E+00	3.153E+00	0.000E+00	NOT IDENT.
TH-234	1.730E-02		2.597E-01	3.207E-01	0.000E+00	FAIL ABUN
U-235	3.409E-02		6.731E-02	1.258E-01	0.000E+00	NOT IDENT.
NP-236	-1.934E-03		2.082E-02	3.355E-02	0.000E+00	NOT IDENT.
NP-237	-6.471E-03		7.755E-02	1.189E-01	0.000E+00	NOT IDENT.
NP-239	-1.229E-02		7.499E-02	1.326E-01	0.000E+00	NOT IDENT.
AM-241	-2.767E-02		4.752E-02	8.256E-02	0.000E+00	NOT IDENT.
AM-243	4.909E-03		1.554E-02	2.814E-02	0.000E+00	NOT IDENT.
CM-243	1.063E-04		2.869E-02	5.329E-02	0.000E+00	NOT IDENT.
AM-246	1.236E-02		4.751E-02	8.285E-02	0.000E+00	NOT IDENT.
CF-249	-2.094E-04		1.486E-02	2.569E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 14:21:48.98

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473843.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 14-DEC-2007 10:21:22
Sample ID        : G1201473843          Sample quantity  : 1.56220E+02 GRAM
Detector name    : GAM01                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.01  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
SB-125	427.87	41	29.80*	3.061E+00	5.432E-02	5.468E-02	67.70
PA-233	312.17	35	38.60*	3.955E+00	2.787E-02	2.787E-02	99.07

Flag: "*" = Keyline

Sample ID : G1201473843 Acquisition date : 14-DEC-2007 10:21:22

Total number of lines in spectrum 24
Number of unidentified lines 16
Number of lines tentatively identified by NID 8 33.33%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
SB-125	8.62E+07S	1.01	5.432E-02	5.468E-02	3.702E-02	67.70	
PA-233	6.75E+13S	1.00	2.787E-02	2.787E-02	2.761E-02	99.07	
			---	---			
	Total Activity :		8.219E-02	8.255E-02			
	Grand Total Activity :		8.219E-02	8.255E-02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473843 Acquisition date : 14-DEC-2007 10:21:22

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.57	17	108	1.14	107.19	104	6	1.20E-03	****	1.75E+00	
0	92.69	5	264	1.08	185.46	179	12	3.34E-04	****	6.18E+00	T
0	155.24	37	191	0.78	310.58	306	10	2.55E-03	****	6.37E+00	
0	338.66	51	60	1.25	677.52	674	9	3.54E-03	61.1	3.70E+00	T
0	419.31	19	41	1.05	838.85	834	9	1.29E-03	****	3.11E+00	
0	570.80	16	56	4.24	1141.90	1133	13	1.14E-03	****	2.40E+00	
0	609.14	13	77	4.04	1218.58	1211	16	8.92E-04	****	2.27E+00	T
0	654.05	16	21	2.89	1308.41	1304	9	1.13E-03	****	2.13E+00	
0	755.93	23	37	3.30	1512.21	1505	16	1.62E-03	****	1.88E+00	
0	807.44	43	56	4.44	1615.24	1596	29	2.95E-03	****	1.77E+00	T
0	828.63	11	26	2.08	1657.62	1647	13	7.57E-04	****	1.73E+00	
7	961.58	16	10	3.64	1923.56	1918	16	1.13E-03	****	1.51E+00	
7	964.97	18	5	1.65	1930.34	1918	16	1.23E-03	69.7	1.50E+00	T
0	1119.74	17	25	0.65	2239.89	2233	18	1.17E-03	****	1.31E+00	T
0	1202.03	21	7	2.45	2404.46	2397	14	1.49E-03	67.7	1.23E+00	
0	1394.42	9	11	1.46	2789.25	2783	9	6.20E-04	****	1.09E+00	
0	1436.51	6	4	0.65	2873.42	2869	8	4.17E-04	****	1.06E+00	
0	1501.74	8	10	0.62	3003.88	2997	10	5.56E-04	****	1.03E+00	
0	1528.26	8	7	0.49	3056.91	3050	12	5.79E-04	****	1.01E+00	
0	1602.97	13	4	1.37	3206.32	3198	15	9.35E-04	82.7	9.80E-01	
0	1733.52	9	2	0.69	3467.39	3463	9	6.03E-04	92.3	9.34E-01	
0	1954.36	14	0	4.65	3909.00	3903	14	9.72E-04	53.5	8.84E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473843           *
* Acquisition date : 14-DEC-2007 10:21:22 Detector SN#    :                 *
* Detector ID      : GAM01                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.01     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473843          Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5622E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME :  7-MAR-2007 03:44:30 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
SB-125	5.468E-02	3.628E-02	2.750E-02	3.628E-02
PA-233	2.787E-02	2.706E-02	2.040E-02	2.706E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
K-40	-1.041E-01	1.981E-01	1.734E-01	1.981E-01	NOT IDENT.
CO-60	7.343E-03	1.266E-02	1.151E-02	1.266E-02	NOT IDENT.
RH-101	-9.297E-03	1.352E-02	1.027E-02	1.352E-02	NOT IDENT.
CS-137	-1.488E-02	1.748E-02	1.119E-02	1.748E-02	NOT IDENT.
EU-155	-8.793E-03	3.209E-02	2.941E-02	3.209E-02	NOT IDENT.
TL-208	-6.573E-03	1.698E-02	1.229E-02	1.698E-02	NOT IDENT.
PO-209	2.629E-01	2.778E+00	2.401E+00	2.778E+00	NOT IDENT.
BI-211	-1.807E-02	3.776E-01	2.764E-01	3.776E-01	NOT IDENT.
BI-212	4.289E-02	9.600E-02	8.708E-02	9.600E-02	NOT IDENT.
PB-212	-9.017E-03	2.669E-02	1.997E-02	2.669E-02	NOT IDENT.
BI-214	1.474E-02	4.944E-02	2.846E-02	4.944E-02	FAIL ABUN
PB-214	-2.337E-02	3.095E-02	2.433E-02	3.095E-02	NOT IDENT.
RA-223	1.598E-02	6.261E-02	5.626E-02	6.261E-02	NOT IDENT.
AC-228	9.390E-03	5.795E-02	4.744E-02	5.795E-02	FAIL ABUN
PA-234M	2.548E+00	1.584E+00	1.578E+00	1.584E+00	NOT IDENT.
TH-234	1.730E-02	2.597E-01	1.604E-01	2.597E-01	FAIL ABUN
U-235	3.409E-02	6.731E-02	6.294E-02	6.731E-02	NOT IDENT.
NP-236	-1.934E-03	2.082E-02	1.679E-02	2.082E-02	NOT IDENT.
NP-237	-6.471E-03	7.755E-02	5.948E-02	7.755E-02	NOT IDENT.
NP-239	-1.229E-02	7.499E-02	6.636E-02	7.499E-02	NOT IDENT.
AM-241	-2.767E-02	4.752E-02	4.131E-02	4.752E-02	NOT IDENT.
AM-243	4.909E-03	1.554E-02	1.408E-02	1.554E-02	NOT IDENT.
CM-243	1.063E-04	2.869E-02	2.666E-02	2.869E-02	NOT IDENT.
AM-246	1.236E-02	4.751E-02	4.145E-02	4.751E-02	NOT IDENT.
CF-249	-2.094E-04	1.486E-02	1.286E-02	1.486E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	182.3648
63.29	186.4250
74.66	204.2071
74.81	204.2380
74.81	204.2380
77.11	206.9312
77.11	206.9312
86.48	201.1557
87.30	210.2944
87.30	210.2944
92.58	203.1722
98.44	187.5730
103.76	178.6915
105.31	196.2649
129.07	188.7501
143.76	207.6299
198.00	205.0064
209.25	178.9142
228.18	152.0816
238.63	157.8578
242.00	180.0035
269.46	125.9674
270.25	132.0618
277.36	119.3468
295.22	134.5813
300.09	151.2158
312.17	111.9499
338.32	123.5497
351.93	105.4323
387.59	93.1208
409.46	72.5314
427.87	73.0029
463.00	76.0481
510.77	70.7823
583.19	69.4969
609.31	65.2757
661.66	56.5157
727.33	39.9907
763.13	47.2227
768.36	33.4909
785.37	39.5581
794.95	37.3797
806.17	26.8297
831.80	30.8402
860.56	41.2377
896.60	38.5172
911.20	25.4181
934.06	31.6685
964.77	58.1528
968.97	26.4556
1001.03	19.6726
1078.86	26.2726
1120.29	25.4141
1155.19	19.1807
1173.23	18.1725
1238.11	24.8624
1280.96	19.5974
1332.51	22.5854
1377.67	22.7478
1401.50	21.0882
1407.98	19.9980
1460.80	18.2393
1509.23	18.0488
1588.20	16.6247
1620.50	15.7182
1729.60	6.9795
1764.49	14.0234

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473843

Total Uranium Activity	1.5773E-02	ug/g
Total Uranium Counting Unc.	3.1142E-02	ug/g
Total Uranium Tpu	3.1142E-08	ug/g
Total Uranium Mda	2.9122E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 14:22:27.47

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473844.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 10:21:54
Sample ID        : G1201473844          Sample quantity  : 1.53280E+02 GRAM
Detector name    : GAM02                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:04.31  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.03*	81	546	1.01	125.60	122	9	5.62E-03	57.9	
2	3	74.82*	329	398	1.04	149.17	144	16	2.28E-02	12.2	1.65E+00
3	3	77.13*	584	389	1.08	153.77	144	16	4.06E-02	7.1	
4	4	84.19*	62	404	0.86	167.88	163	31	4.33E-03	53.6	3.33E+00
5	4	87.14	228	609	1.37	173.77	163	31	1.58E-02	19.3	
6	4	89.95	182	503	1.22	179.39	163	31	1.26E-02	21.7	
7	4	92.68*	264	527	1.26	184.84	163	31	1.84E-02	19.3	
8	0	98.61*	23	495	1.17	196.70	194	8	1.58E-03	180.1	
9	0	105.99	79	591	2.02	211.44	207	10	5.52E-03	58.4	
10	0	129.30	97	399	0.92	258.02	255	7	6.77E-03	35.3	
11	0	143.94*	104	494	1.04	287.26	283	9	7.20E-03	42.0	
12	1	185.85*	200	343	1.22	371.01	366	14	1.39E-02	20.4	1.63E+00
13	1	188.23	44	299	1.22	375.78	366	14	3.09E-03	74.5	
14	0	205.01	58	369	1.43	409.30	406	8	4.03E-03	58.8	
15	0	209.37	157	492	1.22	418.01	414	11	1.09E-02	28.5	
16	0	223.81	31	282	0.77	446.87	444	7	2.15E-03	91.6	
17	5	238.62*	1524	281	1.12	476.45	473	15	1.06E-01	3.3	1.33E+00
18	5	241.59*	331	336	1.57	482.40	473	15	2.30E-02	12.5	
19	0	270.18	137	290	1.68	539.54	534	10	9.50E-03	24.8	
20	0	295.15*	519	323	1.29	589.43	582	12	3.60E-02	8.4	
21	0	300.01	108	220	0.99	599.14	595	9	7.48E-03	26.7	
22	0	328.46	73	284	2.78	655.99	650	11	5.09E-03	46.2	
23	0	338.28	331	256	1.07	675.61	670	11	2.30E-02	10.9	
24	0	351.89*	723	227	1.09	702.81	698	11	5.02E-02	5.7	
25	0	364.40	11	125	0.44	727.80	724	7	7.54E-04	174.5	
26	0	372.53	20	221	0.59	744.05	737	13	1.39E-03	154.9	
27	0	403.89	35	256	5.30	806.72	797	16	2.45E-03	102.7	
28	4	409.57	60	147	2.01	818.07	813	15	4.18E-03	40.2	8.06E-01
29	4	412.76	28	111	1.35	824.44	813	15	1.93E-03	70.5	
30	0	422.84	23	107	1.04	844.59	842	7	1.58E-03	78.5	
31	0	462.89	104	145	1.35	924.62	919	12	7.24E-03	25.0	
32	0	510.77*	141	223	1.65	1020.30	1012	17	9.81E-03	30.3	
33	0	536.15	11	87	0.76	1071.03	1069	8	7.73E-04	147.7	
34	0	563.11	16	135	4.14	1124.89	1120	12	1.09E-03	149.8	
35	0	583.07*	440	111	1.50	1164.79	1160	11	3.06E-02	7.4	
36	0	609.22*	557	120	1.64	1217.04	1211	12	3.87E-02	6.0	
37	0	661.94	43	92	1.43	1322.41	1315	10	2.97E-03	44.7	
38	0	697.53	28	98	0.56	1393.54	1388	11	1.93E-03	71.7	

Sample ID : G1201473844 Acquisition date : 14-DEC-2007 10:21:54

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	726.95	151	88	1.59	1452.32	1446	13	1.05E-02	15.1	
40	2	765.50*	19	44	1.87	1529.37	1526	30	1.34E-03	69.9	1.74E+00
41	2	768.32*	81	59	1.67	1535.00	1526	30	5.63E-03	22.0	
42	0	794.71	72	61	2.24	1587.73	1582	11	4.97E-03	24.2	
43	0	835.14	29	32	1.43	1668.54	1665	7	2.01E-03	38.8	
44	0	860.70	60	64	1.43	1719.61	1715	10	4.14E-03	28.4	
45	0	878.41	84	226	15.24	1755.02	1732	43	5.83E-03	62.3	
46	0	911.11	341	81	1.90	1820.36	1813	16	2.37E-02	8.1	
47	0	934.77	60	81	5.64	1867.66	1860	18	4.17E-03	37.5	
48	1	964.40	49	57	1.99	1926.87	1921	29	3.38E-03	34.6	1.28E+00
49	1	968.79*	200	49	1.99	1935.64	1921	29	1.39E-02	10.4	
50	0	1049.63	29	101	7.37	2097.22	2076	25	2.00E-03	97.7	
51	0	1120.67	146	73	1.85	2239.20	2229	17	1.02E-02	15.7	
52	0	1125.81	13	18	0.98	2249.48	2245	7	8.68E-04	62.3	
53	0	1181.47	37	27	1.97	2360.73	2356	10	2.56E-03	31.3	
54	0	1239.20	14	59	0.92	2476.10	2470	9	9.73E-04	103.3	
55	0	1259.11	22	63	5.47	2515.89	2502	19	1.54E-03	90.0	
56	0	1377.58	37	33	1.80	2752.70	2747	13	2.53E-03	36.2	
57	0	1460.31*	719	27	2.21	2918.07	2907	22	4.99E-02	4.3	
58	0	1502.32	21	19	0.67	3002.02	2994	14	1.43E-03	51.6	
59	0	1509.57	17	27	3.66	3016.53	3007	15	1.19E-03	69.6	
60	0	1620.64*	18	8	3.23	3238.54	3232	11	1.26E-03	43.1	
61	0	1639.02	7	15	3.33	3275.27	3266	12	4.85E-04	117.3	
62	0	1662.71	7	19	1.18	3322.64	3315	12	4.79E-04	136.6	
63	0	1684.54	23	3	4.40	3366.27	3360	12	1.60E-03	25.7	
64	0	1729.38	35	23	2.09	3455.90	3445	19	2.44E-03	37.2	
65	0	1764.25*	89	7	1.97	3525.60	3518	17	6.15E-03	14.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473844      *
* Acquisition date : 14-DEC-2007 10:21:54 Detector SN#    :                 *
* Detector ID      : GAM02                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:04.31     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473844          Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5328E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-OCT-2007 15:13:16 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	7.755E+00	8.180E-01	2.370E-01	0.000E+00
CS-137	2.837E-02	2.493E-02	3.301E-02	0.000E+00
EU-155	7.413E-02	8.499E-02	8.698E-02	0.000E+00
TL-208	2.626E-01	4.115E-02	2.903E-02	0.000E+00
BI-212	7.809E-01	2.374E-01	2.259E-01	0.000E+00
PB-212	8.862E-01	7.817E-02	4.896E-02	0.000E+00
BI-214	6.322E-01	8.328E-02	5.455E-02	0.000E+00
PB-214	6.482E-01	8.140E-02	5.963E-02	0.000E+00
RA-223	2.753E-01	1.351E-01	1.540E-01	0.000E+00
AC-228	9.911E-01	1.740E-01	1.083E-01	0.000E+00
TH-234	1.034E+00	3.993E-01	4.088E-01	0.000E+00
U-235	1.794E-01	1.481E-01	1.603E-01	0.000E+00
NP-236	1.200E-02	4.235E-02	4.884E-02	0.000E+00
NP-237	4.178E-01	1.618E-01	1.921E-01	0.000E+00
AM-243	1.422E-01	3.595E-02	4.480E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	1.009E-02	2.048E-02	3.595E-02	0.000E+00	NOT IDENT.
RH-101	-1.187E-02	1.746E-02	2.782E-02	0.000E+00	NOT IDENT.
SB-125	-3.565E-02	5.016E-02	7.087E-02	0.000E+00	NOT IDENT.
PO-209	2.267E+00	3.852E+00	6.811E+00	0.000E+00	NOT IDENT.
BI-211	2.376E-01	5.622E-01	8.695E-01	0.000E+00	NOT IDENT.
PA-233	9.288E-03	3.063E-02	5.536E-02	0.000E+00	NOT IDENT.
PA-234M	-6.513E-01	2.638E+00	4.278E+00	0.000E+00	NOT IDENT.
NP-239	-2.831E-02	1.275E-01	1.905E-01	0.000E+00	NOT IDENT.
AM-241	8.265E-03	8.732E-02	1.498E-01	0.000E+00	NOT IDENT.
CM-243	-2.826E-02	5.569E-02	8.068E-02	0.000E+00	NOT IDENT.
AM-246	-3.061E-02	7.077E-02	1.181E-01	0.000E+00	NOT IDENT.
CF-249	-8.195E-03	1.902E-02	3.239E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 14:22:28.33

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473844.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 14-DEC-2007 10:21:54
Sample ID        : G1201473844          Sample quantity  : 1.53280E+02 GRAM
Detector name    : GAM02                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:04.31  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	719	10.66*	1.065E+00	7.755E+00	7.755E+00	10.76
CS-137	661.66	43	85.10*	2.181E+00	2.823E-02	2.837E-02	89.67
EU-155	105.31	79	21.20*	6.375E+00	7.197E-02	7.413E-02	116.99
TL-208	277.36	------	6.31	4.354E+00	------	Line Not Found	------
	510.77	141	22.60	2.710E+00	2.825E-01	2.825E-01	60.85
	583.19	440	84.50*	2.430E+00	2.626E-01	2.626E-01	15.99
	763.13	------	1.81	1.923E+00	------	Line Not Found	------
	860.56	60	12.42	1.722E+00	3.415E-01	3.415E-01	57.24
BI-212	727.33	151	11.80*	2.008E+00	7.809E-01	7.809E-01	31.02
	785.37	------	1.10	1.873E+00	------	Line Not Found	------
	1620.50	18	1.49	9.856E-01	1.516E+00	1.516E+00	86.51
PB-212	74.81	329	10.40	4.149E+00	9.328E-01	9.328E-01	25.79
	77.11	584	17.50	4.419E+00	9.254E-01	9.254E-01	16.40
	87.30	228	7.81	5.391E+00	6.634E-01	6.634E-01	39.51
	238.63	1524	43.30*	4.862E+00	8.862E-01	8.862E-01	9.00
	300.09	108	3.28	4.104E+00	9.800E-01	9.800E-01	53.86
BI-214	609.31	557	46.10*	2.342E+00	6.321E-01	6.322E-01	13.44
	768.36	81	4.94	1.911E+00	1.052E+00	1.052E+00	44.60
	806.17	------	1.22	1.829E+00	------	Line Not Found	------
	934.06	60	3.03	1.595E+00	1.520E+00	1.520E+00	75.33
	1120.29	146	15.10	1.345E+00	8.828E-01	8.828E-01	31.91
	1155.19	------	1.63	1.308E+00	------	Line Not Found	------
	1238.11	14	5.79	1.227E+00	2.416E-01	2.416E-01	206.75
	1280.96	------	1.43	1.191E+00	------	Line Not Found	------
	1377.67	37	4.00	1.118E+00	9.996E-01	9.997E-01	72.71
	1401.50	------	1.27	1.102E+00	------	Line Not Found	------
	1407.98	------	2.15	1.098E+00	------	Line Not Found	------
	1509.23	17	2.11	1.038E+00	9.581E-01	9.582E-01	139.45
	1729.60	35	2.92	9.455E-01	1.557E+00	1.557E+00	74.72
	1764.49	89	15.40	9.348E-01	7.532E-01	7.533E-01	30.13
PB-214	74.81	329	6.44	4.149E+00	1.506E+00	1.506E+00	25.79
	77.11	584	10.80	4.419E+00	1.499E+00	1.500E+00	16.40

Sample ID : G1201473844 Acquisition date : 14-DEC-2007 10:21:54

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	228	4.84	5.391E+00	1.070E+00	1.071E+00	39.51
	242.00	331	7.43	4.819E+00	1.132E+00	1.132E+00	25.73
	295.22	519	19.30	4.155E+00	7.924E-01	7.924E-01	18.05
	351.93	723	37.60*	3.634E+00	6.482E-01	6.482E-01	12.81
RA-223	269.46	137	13.70*	4.440E+00	2.753E-01	2.753E-01	50.08
AC-228	129.07	97	2.42	6.595E+00	7.477E-01	7.477E-01	70.89
	209.25	157	3.89	5.324E+00	9.295E-01	9.295E-01	57.32
	270.25	137	3.46	4.440E+00	1.090E+00	1.090E+00	50.08
	338.32	331	11.27	3.746E+00	9.601E-01	9.601E-01	22.56
	409.46	60	1.92	3.230E+00	1.189E+00	1.189E+00	80.59
	463.00	104	4.40	2.933E+00	9.897E-01	9.897E-01	50.33
	794.95	72	4.25	1.853E+00	1.112E+00	1.112E+00	48.84
	911.20	341	25.80*	1.634E+00	9.911E-01	9.911E-01	17.91
	964.77	49	4.99	1.549E+00	7.700E-01	7.700E-01	69.50
	968.97	200	15.80	1.542E+00	1.005E+00	1.005E+00	22.18
	1588.20	------	3.22	9.997E-01	------	Line Not Found	------
TH-234	63.29	81	4.80	2.563E+00	8.047E-01	8.047E-01	116.18
	92.58	264	5.41*	5.785E+00	1.034E+00	1.034E+00	39.40
U-235	143.76	104	10.96*	6.460E+00	1.794E-01	1.794E-01	84.25
NP-236	98.44	23	38.00*	6.105E+00	1.200E-02	1.200E-02	360.21
NP-237	86.48	228	12.40*	5.391E+00	4.178E-01	4.178E-01	39.51
AM-243	74.66	329	68.20*	4.149E+00	1.422E-01	1.422E-01	25.79

Flag: "*" = Keyline

Sample ID : G1201473844 Acquisition date : 14-DEC-2007 10:21:54

Total number of lines in spectrum 65
Number of unidentified lines 26
Number of lines tentatively identified by NID 39 60.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	7.755E+00	7.755E+00	0.835E+00	10.76	
CS-137	9.47E+08S	1.00	2.823E-02	2.837E-02	2.544E-02	89.67	
EU-155	1.57E+08S	1.03	7.197E-02	7.413E-02	8.672E-02	116.99	
TL-208	4.43E+17S	1.00	2.626E-01	2.626E-01	0.420E-01	15.99	
BI-212	4.43E+17S	1.00	7.809E-01	7.809E-01	2.422E-01	31.02	
PB-212	4.43E+17S	1.00	8.862E-01	8.862E-01	0.798E-01	9.00	
BI-214	5.05E+10S	1.00	6.321E-01	6.322E-01	0.850E-01	13.44	
PB-214	5.05E+10S	1.00	6.482E-01	6.482E-01	0.831E-01	12.81	
RA-223	1.04E+12S	1.00	2.753E-01	2.753E-01	1.379E-01	50.08	
AC-228	4.43E+17S	1.00	9.911E-01	9.911E-01	1.776E-01	17.91	
TH-234	1.41E+17S	1.00	1.034E+00	1.034E+00	0.407E+00	39.40	
U-235	2.22E+16S	1.00	1.794E-01	1.794E-01	1.511E-01	84.25	
NP-236	4.89E+12S	1.00	1.200E-02	1.200E-02	4.321E-02	360.21	
NP-237	6.75E+13S	1.00	4.178E-01	4.178E-01	1.651E-01	39.51	
AM-243	2.33E+11S	1.00	1.422E-01	1.422E-01	0.367E-01	25.79	
			---	---			
		Total Activity :	1.412E+01	1.412E+01			

Grand Total Activity : 1.412E+01 1.412E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473844 Acquisition date : 14-DEC-2007 10:21:54

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	84.19	62	404	0.86	167.88	163	31	4.33E-03	****	5.14E+00	
4	89.95	182	503	1.22	179.39	163	31	1.26E-02	43.4	5.60E+00	
1	185.85	200	343	1.22	371.01	366	14	1.39E-02	40.9	5.74E+00	
1	188.23	44	299	1.22	375.78	366	14	3.09E-03	****	5.70E+00	
0	205.01	58	369	1.43	409.30	406	8	4.03E-03	****	5.40E+00	
0	223.81	31	282	0.77	446.87	444	7	2.15E-03	****	5.09E+00	
0	328.46	73	284	2.78	655.99	650	11	5.09E-03	92.3	3.83E+00	
0	364.40	11	125	0.44	727.80	724	7	7.54E-04	****	3.54E+00	
0	372.53	20	221	0.59	744.05	737	13	1.39E-03	****	3.48E+00	
0	403.89	35	256	5.30	806.72	797	16	2.45E-03	****	3.27E+00	
4	412.76	28	111	1.35	824.44	813	15	1.93E-03	****	3.21E+00	
0	422.84	23	107	1.04	844.59	842	7	1.58E-03	****	3.15E+00	
0	536.15	11	87	0.76	1071.03	1069	8	7.73E-04	****	2.60E+00	
0	563.11	16	135	4.14	1124.89	1120	12	1.09E-03	****	2.50E+00	
0	697.53	28	98	0.56	1393.54	1388	11	1.93E-03	****	2.08E+00	
2	765.50	19	44	1.87	1529.37	1526	30	1.34E-03	****	1.92E+00	
0	835.14	29	32	1.43	1668.54	1665	7	2.01E-03	77.5	1.77E+00	
0	878.41	84	226	15.24	1755.02	1732	43	5.83E-03	****	1.69E+00	
0	1049.63	29	101	7.37	2097.22	2076	25	2.00E-03	****	1.43E+00	
0	1125.81	13	18	0.98	2249.48	2245	7	8.68E-04	****	1.34E+00	
0	1181.47	37	27	1.97	2360.73	2356	10	2.56E-03	62.6	1.28E+00	
0	1259.11	22	63	5.47	2515.89	2502	19	1.54E-03	****	1.21E+00	
0	1502.32	21	19	0.67	3002.02	2994	14	1.43E-03	****	1.04E+00	
0	1639.02	7	15	3.33	3275.27	3266	12	4.85E-04	****	9.78E-01	
0	1662.71	7	19	1.18	3322.64	3315	12	4.79E-04	****	9.69E-01	
0	1684.54	23	3	4.40	3366.27	3360	12	1.60E-03	51.3	9.61E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473844           *
* Acquisition date : 14-DEC-2007 10:21:54 Detector SN#    :                 *
* Detector ID      : GAM02                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:04.31     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473844          Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5328E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-OCT-2007 15:13:16 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	7.755E+00	8.180E-01	1.186E-01	8.180E-01
CS-137	2.837E-02	2.493E-02	1.652E-02	2.493E-02
EU-155	7.413E-02	8.499E-02	4.351E-02	8.499E-02
TL-208	2.626E-01	4.115E-02	1.453E-02	4.115E-02
BI-212	7.809E-01	2.374E-01	1.130E-01	2.374E-01
PB-212	8.862E-01	7.817E-02	2.450E-02	7.817E-02
BI-214	6.322E-01	8.328E-02	2.729E-02	8.328E-02
PB-214	6.482E-01	8.140E-02	2.983E-02	8.140E-02
RA-223	2.753E-01	1.351E-01	7.703E-02	1.351E-01
AC-228	9.911E-01	1.740E-01	5.417E-02	1.740E-01
TH-234	1.034E+00	3.993E-01	2.045E-01	3.993E-01
U-235	1.794E-01	1.481E-01	8.020E-02	1.481E-01
NP-236	1.200E-02	4.235E-02	2.443E-02	4.235E-02
NP-237	4.178E-01	1.618E-01	9.609E-02	1.618E-01
AM-243	1.422E-01	3.595E-02	2.241E-02	3.595E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.009E-02	2.048E-02	1.799E-02	2.048E-02	NOT IDENT.
RH-101	-1.187E-02	1.746E-02	1.392E-02	1.746E-02	NOT IDENT.
SB-125	-3.565E-02	5.016E-02	3.546E-02	5.016E-02	NOT IDENT.
PO-209	2.267E+00	3.852E+00	3.407E+00	3.852E+00	NOT IDENT.
BI-211	2.376E-01	5.622E-01	4.350E-01	5.622E-01	NOT IDENT.
PA-233	9.288E-03	3.063E-02	2.770E-02	3.063E-02	NOT IDENT.
PA-234M	-6.513E-01	2.638E+00	2.140E+00	2.638E+00	NOT IDENT.
NP-239	-2.831E-02	1.275E-01	9.528E-02	1.275E-01	NOT IDENT.
AM-241	8.265E-03	8.732E-02	7.494E-02	8.732E-02	NOT IDENT.
CM-243	-2.826E-02	5.569E-02	4.036E-02	5.569E-02	NOT IDENT.
AM-246	-3.061E-02	7.077E-02	5.910E-02	7.077E-02	NOT IDENT.
CF-249	-8.195E-03	1.902E-02	1.620E-02	1.902E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                           CHARLESTON ,SC 29417                            *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	315.2626
63.29	345.0948
74.66	415.6793
74.81	415.8404
74.81	415.8404
77.11	418.2730
77.11	418.2730
86.48	425.0322
87.30	425.8370
87.30	425.8370
92.58	430.9349
98.44	338.8053
103.76	392.8892
105.31	343.6451
129.07	394.7922
143.76	347.4138
198.00	336.0039
209.25	311.1074
228.18	304.1442
238.63	293.5801
242.00	294.6693
269.46	244.7970
270.25	244.9933
277.36	253.1715
295.22	215.7750
300.09	206.2191
312.17	191.1855
338.32	180.0092
351.93	186.9704
387.59	161.9189
409.46	136.5853
427.87	136.7174
463.00	117.3853
510.77	100.0776
583.19	102.7195
609.31	100.4432
661.66	108.2394
727.33	83.7321
763.13	63.3905
768.36	80.2539
785.37	82.8628
794.95	71.0237
806.17	83.5916
831.80	65.2460
860.56	68.7795
896.60	68.6896
911.20	61.6321
934.06	54.6569
964.77	54.1846
968.97	54.2664
1001.03	60.3698
1078.86	72.2972
1120.29	61.9833
1155.19	69.2549
1173.23	50.6463
1238.11	70.9893
1280.96	45.9120
1332.51	48.5957
1377.67	42.0127
1401.50	53.6187
1407.98	37.1836
1460.80	21.9844
1509.23	39.9579
1588.20	41.0260
1620.50	19.5791
1729.60	18.1505
1764.49	18.2870

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473844

Total Uranium Activity	8.3007E-02	ug/g
Total Uranium Counting Unc.	6.8533E-02	ug/g
Total Uranium Tpu	6.8533E-08	ug/g
Total Uranium Mda	3.7107E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 11:22:55.50

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473845.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 14-DEC-2007 10:22:26
Sample ID        : G1201473845          Sample quantity  : 1.55440E+02 GRAM
Detector name    : GAM03                Detector geometry: CAN
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:01.74  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	59.77	2666	1460	1.31	119.43	113	13	7.41E-01	3.6	
2	0	77.36*	117	816	1.05	154.57	152	7	3.26E-02	41.8	
3	0	88.09*	4646	1432	1.41	176.00	170	14	1.29E+00	2.3	
4	0	93.13*	47	551	1.60	186.06	183	9	1.30E-02	94.7	
5	0	121.99	1910	699	1.39	243.73	236	14	5.31E-01	3.7	
6	0	136.96	169	514	1.10	273.63	269	11	4.69E-02	27.3	
7	0	165.86	754	454	1.35	331.37	326	10	2.09E-01	6.4	
8	0	185.93*	85	316	2.31	371.47	367	9	2.37E-02	40.3	
9	2	238.60*	450	328	1.54	476.71	470	18	1.25E-01	8.7	7.13E-01
10	2	241.64	159	303	1.66	482.78	470	18	4.41E-02	24.0	
11	0	269.65	38	298	1.46	538.75	537	10	1.06E-02	85.8	
12	0	295.15*	89	347	1.51	589.69	585	12	2.47E-02	43.3	
13	0	299.74	18	241	1.34	598.87	596	8	5.14E-03	147.4	
14	0	339.37*	107	433	1.70	678.07	669	17	2.98E-02	45.7	
15	0	352.05*	226	289	1.85	703.41	698	13	6.29E-02	17.0	
16	0	391.67	377	364	1.52	782.59	774	15	1.05E-01	12.2	
17	0	458.17	38	197	1.20	915.50	912	9	1.06E-02	68.4	
18	0	463.13	26	170	1.33	925.42	922	8	7.19E-03	90.5	
19	0	511.50*	71	157	2.95	1022.10	1017	13	1.98E-02	40.5	
20	0	583.09*	165	151	2.22	1165.21	1160	12	4.57E-02	17.0	
21	0	609.42*	144	171	1.71	1217.84	1211	12	3.99E-02	20.2	
22	0	661.71	2373	210	2.15	1322.38	1312	19	6.59E-01	2.5	
23	0	739.34	37	180	1.31	1477.59	1470	16	1.02E-02	83.2	
24	0	788.62	70	199	7.39	1576.14	1566	22	1.94E-02	52.9	
25	0	798.11	5	171	0.82	1595.12	1587	12	1.33E-03	546.4	
26	0	898.44	406	147	2.45	1795.77	1789	14	1.13E-01	8.1	
27	0	911.79*	72	249	2.29	1822.48	1816	16	2.00E-02	50.5	
28	0	1032.00	68	118	4.59	2062.93	2055	18	1.90E-02	39.0	
29	5	1063.88	32	18	1.80	2126.70	2124	13	8.96E-03	26.4	1.82E+00
30	5	1067.06	29	44	1.61	2133.06	2124	13	7.98E-03	43.1	
31	0	1173.55	2285	115	2.83	2346.13	2336	20	6.35E-01	2.4	
32	0	1252.47*	27	15	2.09	2504.04	2499	10	7.40E-03	34.7	
33	0	1332.85	2077	52	2.84	2664.89	2655	25	5.77E-01	2.4	
34	0	1422.30	9	19	0.54	2843.92	2836	15	2.48E-03	111.1	
35	0	1461.63*	19	28	3.04	2922.65	2913	16	5.18E-03	69.0	
36	0	1474.96	14	11	3.67	2949.35	2940	15	3.83E-03	59.5	
37	0	1551.54	49	6	4.97	3102.65	3091	24	1.36E-02	19.5	
38	0	1576.87	22	19	6.13	3153.36	3140	19	6.05E-03	52.6	

Sample ID : G1201473845 Acquisition date : 14-DEC-2007 10:22:26

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1766.63	25	25	0.70	3533.33	3520	20	6.90E-03	53.2	
40	1	1833.87	68	18	3.03	3668.00	3658	25	1.88E-02	25.4	1.69E+00
41	1	1836.69	173	18	3.34	3673.65	3658	25	4.81E-02	10.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473845      *
* Acquisition date : 14-DEC-2007 10:22:26 Detector SN#    :                 *
* Detector ID      : GAM03                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 01:00:01.74     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473845          Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5544E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 28-MAR-2007 19:01:41 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	7.507E-01	1.016E+00	1.124E+00	0.000E+00
CO-60	8.204E+00	7.001E-01	1.690E-01	0.000E+00
CS-137	5.926E+00	4.923E-01	1.523E-01	0.000E+00
TL-208	3.713E-01	1.260E-01	1.436E-01	0.000E+00
PO-209	2.417E+02	4.681E+01	4.028E+01	0.000E+00
PB-212	1.002E+00	1.814E-01	1.993E-01	0.000E+00
PB-214	7.687E-01	2.611E-01	2.733E-01	0.000E+00
RA-223	2.928E-01	4.930E-01	6.123E-01	0.000E+00
NP-237	3.052E+01	2.876E+00	1.081E+00	0.000E+00
AM-241	1.309E+01	1.370E+00	7.186E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
RH-101	1.357E-02		6.107E-02	1.119E-01	0.000E+00	NOT IDENT.
SB-125	-4.313E-02		2.141E-01	3.776E-01	0.000E+00	NOT IDENT.
EU-155	-5.327E-03		2.130E-01	3.869E-01	0.000E+00	NOT IDENT.
BI-211	-4.547E-01		2.928E+00	5.011E+00	0.000E+00	NOT IDENT.
BI-212	1.042E+00		7.026E-01	1.311E+00	0.000E+00	NOT IDENT.
BI-214	0.000E+00		2.475E-01	3.718E-01	0.000E+00	FAIL ABUN
AC-228	7.917E-01		7.886E-01	8.930E-01	0.000E+00	FAIL ABUN
PA-233	-3.061E-02		1.382E-01	2.399E-01	0.000E+00	NOT IDENT.
PA-234M	9.161E+00		1.330E+01	2.328E+01	0.000E+00	NOT IDENT.
TH-234	6.712E-01		1.247E+00	1.778E+00	0.000E+00	FAIL ABUN
U-235	5.424E-02		3.768E-01	6.480E-01	0.000E+00	NOT IDENT.
NP-236	-2.748E-02		1.392E-01	2.213E-01	0.000E+00	NOT IDENT.
NP-239	-1.297E-01		4.579E-01	8.175E-01	0.000E+00	NOT IDENT.
AM-243	1.628E-01		1.366E-01	2.313E-01	0.000E+00	NOT IDENT.
CM-243	1.352E-01		1.983E-01	3.677E-01	0.000E+00	NOT IDENT.
AM-246	-9.408E-02		4.099E-01	7.015E-01	0.000E+00	NOT IDENT.
CF-249	-9.165E-04		1.152E-01	1.702E-01	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-DEC-2007 11:22:56.37

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473845.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 14-DEC-2007 10:22:26
Sample ID        : G1201473845          Sample quantity  : 1.55440E+02 GRAM
Detector name    : GAM03                Detector geometry: CAN
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:01.74  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708131               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	19	10.66*	1.126E+00	7.507E-01	7.507E-01	138.13
CO-60	1173.23	2285	100.00*	1.350E+00	8.176E+00	8.204E+00	8.71
	1332.51	2077	100.00	1.210E+00	8.288E+00	8.317E+00	7.39
CS-137	661.66	2373	85.10*	2.274E+00	5.922E+00	5.926E+00	8.48
TL-208	277.36	------	6.31	4.504E+00	------	Line Not Found	------
	510.77	71	22.60	2.826E+00	5.378E-01	5.378E-01	81.20
	583.19	165	84.50*	2.535E+00	3.713E-01	3.713E-01	34.63
	763.13	------	1.81	2.003E+00	------	Line Not Found	------
	860.56	------	12.42	1.795E+00	------	Line Not Found	------
PO-209	896.60	406	0.47*	1.725E+00	2.417E+02	2.417E+02	19.76
PB-212	74.81	------	10.40	4.762E+00	------	Line Not Found	------
	77.11	117	17.50	5.035E+00	6.425E-01	6.425E-01	83.94
	87.30	4646	7.81	5.929E+00	4.845E+01	4.845E+01	9.62
	238.63	450	43.30*	5.005E+00	1.002E+00	1.002E+00	18.47
	300.09	18	3.28	4.259E+00	6.395E-01	6.395E-01	294.82
PB-214	74.81	------	6.44	4.762E+00	------	Line Not Found	------
	77.11	117	10.80	5.035E+00	1.041E+00	1.041E+00	83.94
	87.30	4646	4.84	5.929E+00	7.819E+01	7.819E+01	9.62
	242.00	159	7.43	4.962E+00	2.079E+00	2.079E+00	48.51
	295.22	89	19.30	4.307E+00	5.174E-01	5.174E-01	86.83
	351.93	226	37.60*	3.781E+00	7.687E-01	7.687E-01	34.66
RA-223	269.46	38	13.70*	4.596E+00	2.928E-01	2.928E-01	171.82
NP-237	86.48	4646	12.40*	5.929E+00	3.052E+01	3.052E+01	9.62
AM-241	59.54	2666	35.90*	2.741E+00	1.309E+01	1.309E+01	10.68

Flag: "*" = Keyline

Sample ID : G1201473845 Acquisition date : 14-DEC-2007 10:22:26

Total number of lines in spectrum 41
Number of unidentified lines 20
Number of lines tentatively identified by NID 21 51.22%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	7.507E-01	7.507E-01	10.37E-01	138.13	
CO-60	1.66E+08S	1.00	8.176E+00	8.204E+00	0.714E+00	8.71	
CS-137	9.47E+08S	1.00	5.922E+00	5.926E+00	0.502E+00	8.48	
TL-208	4.43E+17S	1.00	3.713E-01	3.713E-01	1.286E-01	34.63	
PO-209	3.22E+09S	1.00	2.417E+02	2.417E+02	0.478E+02	19.76	
PB-212	4.43E+17S	1.00	1.002E+00	1.002E+00	0.185E+00	18.47	
PB-214	5.05E+10S	1.00	7.687E-01	7.687E-01	2.664E-01	34.66	
RA-223	1.04E+12S	1.00	2.928E-01	2.928E-01	5.030E-01	171.82	
NP-237	6.75E+13S	1.00	3.052E+01	3.052E+01	0.293E+01	9.62	
AM-241	1.36E+10S	1.00	1.309E+01	1.309E+01	0.140E+01	10.68	
			---	---			
	Total Activity :		3.026E+02	3.027E+02			

Grand Total Activity : 3.026E+02 3.027E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473845 Acquisition date : 14-DEC-2007 10:22:26

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	93.13	47	551	1.60	186.06	183	9	1.30E-02	****	6.22E+00	T
0	121.99	1910	699	1.39	243.73	236	14	5.31E-01	7.4	6.79E+00	
0	136.96	169	514	1.10	273.63	269	11	4.69E-02	54.7	6.68E+00	
0	165.86	754	454	1.35	331.37	326	10	2.09E-01	12.9	6.23E+00	
0	185.93	85	316	2.31	371.47	367	9	2.37E-02	80.7	5.86E+00	
0	339.37	107	433	1.70	678.07	669	17	2.98E-02	91.5	3.89E+00	T
0	391.67	377	364	1.52	782.59	774	15	1.05E-01	24.3	3.49E+00	
0	458.17	38	197	1.20	915.50	912	9	1.06E-02	****	3.09E+00	
0	463.13	26	170	1.33	925.42	922	8	7.19E-03	****	3.06E+00	T
0	609.42	144	171	1.71	1217.84	1211	12	3.99E-02	40.3	2.44E+00	T
0	739.34	37	180	1.31	1477.59	1470	16	1.02E-02	****	2.06E+00	
0	788.62	70	199	7.39	1576.14	1566	22	1.94E-02	****	1.94E+00	
0	798.11	5	171	0.82	1595.12	1587	12	1.33E-03	****	1.92E+00	
0	911.79	72	249	2.29	1822.48	1816	16	2.00E-02	****	1.70E+00	T
0	1032.00	68	118	4.59	2062.93	2055	18	1.90E-02	78.1	1.52E+00	
5	1063.88	32	18	1.80	2126.70	2124	13	8.96E-03	52.9	1.48E+00	
5	1067.06	29	44	1.61	2133.06	2124	13	7.98E-03	86.1	1.47E+00	
0	1252.47	27	15	2.09	2504.04	2499	10	7.40E-03	69.3	1.28E+00	
0	1422.30	9	19	0.54	2843.92	2836	15	2.48E-03	****	1.15E+00	
0	1474.96	14	11	3.67	2949.35	2940	15	3.83E-03	****	1.12E+00	
0	1551.54	49	6	4.97	3102.65	3091	24	1.36E-02	39.0	1.08E+00	
0	1576.87	22	19	6.13	3153.36	3140	19	6.05E-03	****	1.07E+00	
0	1766.63	25	25	0.70	3533.33	3520	20	6.90E-03	****	1.00E+00	
1	1833.87	68	18	3.03	3668.00	3658	25	1.88E-02	50.8	9.86E-01	
1	1836.69	173	18	3.34	3673.65	3658	25	4.81E-02	20.6	9.86E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473845           *
* Acquisition date : 14-DEC-2007 10:22:26 Detector SN#    :                 *
* Detector ID      : GAM03                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 01:00:01.74     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473845          Analyst initials: MJH1            *
* Batch Number     : 708131               Sample Quantity : 1.5544E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 28-MAR-2007 19:01:41 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	7.507E-01	1.016E+00	5.625E-01	1.016E+00
CO-60	8.204E+00	7.001E-01	8.456E-02	7.001E-01
CS-137	5.926E+00	4.923E-01	7.622E-02	4.923E-01
TL-208	3.713E-01	1.260E-01	7.183E-02	1.260E-01
PO-209	2.417E+02	4.681E+01	2.015E+01	4.681E+01
PB-212	1.002E+00	1.814E-01	9.971E-02	1.814E-01
PB-214	7.687E-01	2.611E-01	1.367E-01	2.611E-01
RA-223	2.928E-01	4.930E-01	3.063E-01	4.930E-01
NP-237	3.052E+01	2.876E+00	5.410E-01	2.876E+00
AM-241	1.309E+01	1.370E+00	3.595E-01	1.370E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
RH-101	1.357E-02	6.107E-02	5.596E-02	6.107E-02	NOT IDENT.
SB-125	-4.313E-02	2.141E-01	1.889E-01	2.141E-01	NOT IDENT.
EU-155	-5.327E-03	2.130E-01	1.936E-01	2.130E-01	NOT IDENT.
BI-211	-4.547E-01	2.928E+00	2.507E+00	2.928E+00	NOT IDENT.
BI-212	1.042E+00	7.026E-01	6.559E-01	7.026E-01	NOT IDENT.
BI-214	6.171E-01	2.475E-01	1.860E-01	2.475E-01	FAIL ABUN
AC-228	7.917E-01	7.886E-01	4.468E-01	7.886E-01	FAIL ABUN
PA-233	-3.061E-02	1.382E-01	1.200E-01	1.382E-01	NOT IDENT.
PA-234M	9.161E+00	1.330E+01	1.165E+01	1.330E+01	NOT IDENT.
TH-234	6.712E-01	1.247E+00	8.893E-01	1.247E+00	FAIL ABUN
U-235	5.424E-02	3.768E-01	3.242E-01	3.768E-01	NOT IDENT.
NP-236	-2.748E-02	1.392E-01	1.107E-01	1.392E-01	NOT IDENT.
NP-239	-1.297E-01	4.579E-01	4.090E-01	4.579E-01	NOT IDENT.
AM-243	1.628E-01	1.366E-01	1.157E-01	1.366E-01	NOT IDENT.
CM-243	1.352E-01	1.983E-01	1.840E-01	1.983E-01	NOT IDENT.
AM-246	-9.408E-02	4.099E-01	3.510E-01	4.099E-01	NOT IDENT.
CF-249	-9.165E-04	1.152E-01	8.516E-02	1.152E-01	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	804.6581
63.29	720.3979
74.66	823.5470
74.81	857.9899
74.81	857.9899
77.11	838.7178
77.11	838.7178
86.48	1023.4716
87.30	942.8117
87.30	942.8117
92.58	533.2192
98.44	503.7421
103.76	486.1725
105.31	501.5141
129.07	395.1069
143.76	364.3085
198.00	353.1966
209.25	384.8177
228.18	378.0688
238.63	329.7925
242.00	294.1971
269.46	264.6680
270.25	276.3872
277.36	293.8950
295.22	259.3455
300.09	282.4750
312.17	272.8448
338.32	257.9366
351.93	272.4319
387.59	283.1912
409.46	247.1007
427.87	250.2604
463.00	270.3003
510.77	212.5382
583.19	175.1992
609.31	176.5576
661.66	161.9979
727.33	143.1096
763.13	175.9462
768.36	175.3793
785.37	170.6009
794.95	122.0977
806.17	174.9012
831.80	182.9380
860.56	208.8757
896.60	202.9170
911.20	214.6598
934.06	228.9727
964.77	234.5767
968.97	208.0138
1001.03	152.7699
1078.86	162.4990
1120.29	119.8976
1155.19	104.8287
1173.23	99.5927
1238.11	46.3087
1280.96	46.8652
1332.51	40.4456
1377.67	32.7422
1401.50	25.7370
1407.98	38.1540
1460.80	35.5263
1509.23	21.1444
1588.20	40.5434
1620.50	30.8585
1729.60	28.6405
1764.49	19.8980

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473845

Total Uranium Activity	2.5095E-02	ug/g
Total Uranium Counting Unc.	1.7436E-01	ug/g
Total Uranium Tpu	1.7436E-07	ug/g
Total Uranium Mda	1.5000E-01	ug/g

Radiochemistry Batch Checklist, Rev 6

Batch# 708133 Product: DS Date: 12/17/07

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to100 mg for GAB.			NA
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125%. Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NO
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA
Aliquot Correction completed if required.			NA

GEL Laboratories, LLC

1/2/2007

Primary Review Performed By: [signature] 12/17/07

Secondary Review Performed By: [signature] 12/18/07

12/19

SCAN

Gamma Spec Que Sheet

12/05/2007

Batch #: 708133 **Analyst:** MJH1 **First Client DueDate:** 12/18/2007 **Internal Due Date:** 12/09/2007

Gamma Spike Isotope: Mixed Gamma **Spike Code:** N/A **Expiration Date:** N/A **Vol:** N/A **Nominal Concentration:** N/A

Gamma LCS Isotope: Mixed Gamma **LCS Code:** 1032-A **Expiration Date:** 12/3/08 **Vol:** 1.0mL **Nominal Concentration:** AM241: 15.96 Co60: 8.520

Initials: MJH **Prep Date:** 12/5/07 **Witness:** N/A Cs137: 6.103 ✓

Sample ID	Client Description / Container ID	Type	Hazard Code	RDL	Client	Matrix	Collect Date	Wet/Dry Aliquot (1 g/F)	Detector	Sealing Date/Time (if Applicable)
198701037-1	SB-CZ-SS-2344-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	145.94	11 ~~20~~ MJH 12/10/07	
198701038-1	SB-CZ-SS-2345-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	112.10	12 ~~21~~	
198701039-1	SB-CZ-SS-2346-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00	77.79	20 ~~22~~	
198701040-1	SB-CZ-SS-2347-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00	96.25	21	
198701041-1	SB-CZ-SS-2348-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	109.23	21	
198701042-1	SB-CZ-SS-2349-ST	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	102.89	23	
198701043-1	SB-CZ-SS-2336-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	143.42	17	
198701044-1	SB-CZ-SS-2337-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	129.55	2	
198701045-1	SB-CZ-SS-2338-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	134.21	6	
198701046-1	SB-CZ-SS-2339-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	131.80	7	
198701047-1	SB-CZ-SS-2340-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	115.06	22	
198701048-1	SB-CZ-SS-2341-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	102.92	14	
198701049-1	SB-CZ-SS-2342-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	144.27	16	
198701050-1	SB-CZ-SS-2343-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	117.20	19	
198701051-1	SB-CZ-SS-2344-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	161.18	20	
198701052-1	SB-CZ-SS-2345-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	136.00	1	
198701053-1	SB-CZ-SS-2346-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00	69.03	22	
198701054-1	SB-CZ-SS-2347-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00 MP	111.52	4	
198701055-1	SB-CZ-SS-2348-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00	110.47	5	
198701056-1	SB-CZ-SS-2349-SD	SAMPLE		.08 pCi/g	SCAN001	SOIL	28-SEP-07 00:00:00	106.33	13	
1201473846-1	MB for batch 708133	MB		.08 pCi/g	QC ACCOUNT	SOIL	12/5/07	161.18	17	
1201473847-1	SB-CZ-SS-2344-ST(198701037DUP	DUP		.08 pCi/g	QC ACCOUNT	SOIL	28-SEP-07 00:00:00	149.08	21	
1201473848-1	LCS for batch 708133	LCS		.08 pCi/g	QC ACCOUNT	SOIL	12/5/07	155.44	11	MJH 12/11/07
							✓	✓	✓	

GEL Laboratories LLC, Radiochemistry Division

Data Reviewed By: Helen G Crow 12/17/07
S. Eulam 12/18/07

Failed RDL Report

Batch Id	Samp Id	Sample Type	Run Date	Parmname	Result	MDA	RDL
708133	198701037	SAMPLE	17-DEC-07				
708133	198701038	SAMPLE	17-DEC-07				
708133	198701039	SAMPLE	16-DEC-07				
708133	198701040	SAMPLE	16-DEC-07				
708133	198701041	SAMPLE	17-DEC-07				
708133	198701042	SAMPLE	17-DEC-07				
708133	198701043	SAMPLE	17-DEC-07				
708133	198701044	SAMPLE	17-DEC-07				
708133	198701045	SAMPLE	17-DEC-07				
708133	198701046	SAMPLE	17-DEC-07				
708133	198701047	SAMPLE	17-DEC-07				
708133	198701048	SAMPLE	17-DEC-07				
708133	198701049	SAMPLE	17-DEC-07				
708133	198701050	SAMPLE	17-DEC-07				
708133	198701051	SAMPLE	17-DEC-07				
708133	198701052	SAMPLE	17-DEC-07				
708133	198701053	SAMPLE	16-DEC-07				
708133	198701054	SAMPLE	17-DEC-07				
708133	198701055	SAMPLE	17-DEC-07				
708133	198701056	SAMPLE	17-DEC-07				
708133	1201473846	MB	17-DEC-07				
708133	1201473847	DUP	17-DEC-07				
708133	1201473848	LCS	17-DEC-07	Antimony-125	0.09001	0.2887	0.200
				Bismuth-212	0.4424	0.9683	0.500
				Thorium-234	0.4758	1.295	0.500

GEL QUALS

Batch ID: 708133

Report run on: December 17, 2007 6:51 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701039-1 16-DEC-2007 16:47	Americium-243	UI	UI	UI	Data rejected due to interference.		.121			
	Lead-214	UI	UI	UI	Data rejected due to interference.		.3331		.1	.1
	Neptunium-236	UI	UI	UI	Data rejected due to interference.		.0328			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2653			
198701040-1 16-DEC-2007 16:47	Americium-243	UI	UI	UI	Data rejected due to interference.		.1389			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4638			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		4.381			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2347			
198701053-1 16-DEC-2007 16:48	Americium-243	UI	UI	UI	Data rejected due to interference.		.1313			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3731			
	Protactinium-234m	UI	UI	UI	Data rejected due to a high counting uncertainty.		3.361			
198701037-1 17-DEC-2007 11:03	Americium-243	UI	UI	UI	Data rejected due to interference.		.1332			
	Curium-243	UI	UI	UI	Data rejected due to interference.		.09145			
	Europium-155	UI	UI	UI	Data rejected due to interference.		.1018		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3574			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		3.223			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2287			
198701038-1 17-DEC-2007 11:03	Americium-243	UI	UI	UI	Data rejected due to interference.		.1348			
	Bismuth-212	UI	UI	UI	Data rejected due to a high counting uncertainty.		.2628		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.2957			

GEL QUALS

Batch ID: 708133

Report run on: December 17, 2007 6:51 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701038-1 17-DEC-2007 11:03	Radium-223	UI	UI	UI	Data rejected due to interference.		.2198			
198701041-1 17-DEC-2007 11:13	Actinium-228	UI	UI	UI	Data rejected due to low abundance.		.4889		.8	.8
	Americium-243	UI	UI	UI	Data rejected due to interference.		.1149			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3376			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2111			
198701042-1 17-DEC-2007 11:13	Americium-243	UI	UI	UI	Data rejected due to interference.		.1055			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5153			
	Radium-223	UI	UI	UI	Data rejected due to high peak-width.		.1898			
198701043-1 17-DEC-2007 11:24	Americium-243	UI	UI	UI	Data rejected due to interference.		.1683			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5173			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2219			
198701044-1 17-DEC-2007 12:02	Americium-243	UI	UI	UI	Data rejected due to interference.		.163			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3538			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		3.984			
198701052-1 17-DEC-2007 12:02	Americium-243	UI	UI	UI	Data rejected due to interference.		.1522			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4125			
198701045-1 17-DEC-2007 12:03	Americium-243	UI	UI	UI	Data rejected due to interference.		.1297			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3448			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2162			

GEL QUALS

Batch ID: 708133

Report run on: December 17, 2007 6:51 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701045-1 17-DEC-2007 12:03										
198701046-1 17-DEC-2007 12:03	Americium-243	UI	UI	UI	Data rejected due to interference.		.1187			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.2524			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3014			
198701047-1 17-DEC-2007 12:04	Americium-243	UI	UI	UI	Data rejected due to interference.		.1552			
	Curium-243	UI	UI	UI	Data rejected due to interference.		.08265			
	Europium-155	UI	UI	UI	Data rejected due to interference.		.09197		.5	.5
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5009			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.1605			
198701048-1 17-DEC-2007 12:04	Americium-243	UI	UI	UI	Data rejected due to interference.		.167			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3827			
198701049-1 17-DEC-2007 12:05	Americium-243	UI	UI	UI	Data rejected due to interference.		.132			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4269			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.177			
198701050-1 17-DEC-2007 12:06	Americium-243	UI	UI	UI	Data rejected due to interference.		.1472			
	Americium-246	UI	UI	UI	Data rejected due to high peak-width.		.1748			
	Californium-249	UI	UI	UI	Data rejected due to high peak-width.		.03458			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4418			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.1986			

GEL QUALS

Batch ID: 708133

Report run on: December 17, 2007 6:51 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
198701051-1 17-DEC-2007 12:07	Americium-243	UI	UI	UI	Data rejected due to interference.		.1393			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3616			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.2829			
	Cesium-137	UI	UI	UI	Data rejected due to high counting uncertainty.		.027661			
198701054-1 17-DEC-2007 12:36	Americium-243	UI	UI	UI	Data rejected due to interference.		.1229			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.5023			
	Protactinium-234m	UI	UI	UI	Data rejected due to no valid peak.		3.906			
	Radium-223	UI	UI	UI	Data rejected due to interference.		.3568			
198701055-1 17-DEC-2007 14:29	Americium-243	UI	UI	UI	Data rejected due to interference.		.1565			
	Bismuth-212	UI	UI	UI	Data rejected due to high peak-width.		.3943		.5	.5
	Bismuth-214	UI	UI	UI	Data rejected due to low abundance.		.4445		.2	.2
	Cesium-137	UI	UI	UI	Data rejected due to high peak-width.		.06815		.1	.1
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.4522			
198701056-1 17-DEC-2007 14:29	Actinium-228	UI	UI	UI	Data rejected due to low abundance.		.6055		.8	.8
	Americium-243	UI	UI	UI	Data rejected due to interference.		.08421			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.3692			
	Thallium-208	UI	UI	UI	Data rejected due to low abundance.		.09505		.08	.08
1201473847-1 DUP 17-DEC-2007 14:31	Americium-243	UI	UI	UI	Data rejected due to interference.		.1332			
	Neptunium-237	UI	UI	UI	Data rejected due to interference.		.2975			

Gamma Review Report based on Result > MDA for Batch:708133

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701037	28-SEP-07 00:00	17-DEC-07 11:03	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.7523	0.1386	pCi/g	0.08794	0.800	911.4	1	1.33	IDENTIFIED	8.311		
Americium-243	JNT	0.1332	0.02584	pCi/g	0.02996	Y	74.74	1	0.9328	IDENTIFIED	9.331	✓ UJ	
Bismuth-212	✓	0.4706	0.2029	pCi/g	0.1782	0.500	727.3	1	1.123	IDENTIFIED	21.63		
Bismuth-214	✓	0.7304	0.09436	pCi/g	0.04645	0.200	609.3	1	1.259	IDENTIFIED	5.557		
Cesium-137	✓	0.2139	0.03295	pCi/g	0.02232	0.100	661.7	1	1.185	IDENTIFIED	6.875		
Curium-243	JNT	0.09145	0.05293	pCi/g	0.05807	Y	105.5	2	2.457	IDENTIFIED	29.36	✓ UJ	
Europium-155	JNT	0.1018	0.05889	pCi/g	0.06225	0.500	105.5	2	2.457	IDENTIFIED	29.36	✓ UJ	
Lead-212	✓	0.6484	0.05896	pCi/g	0.03812	0.100	238.6	1	0.9349	IDENTIFIED	3.591		
Lead-214	✓	0.8247	0.08721	pCi/g	0.04902	0.100	351.9	1	1.128	IDENTIFIED	4.638		
Neptunium-237	JNT	0.3574	0.1078	pCi/g	0.1389	Y	87.15	1	1.013	IDENTIFIED	14.95	✓ UJ	
Potassium-40	✓	3.888	0.498	pCi/g	0.2798	1.00	1461	1	2.074	IDENTIFIED	5.513		
Protactinium-234m	NUP	3.223	3.087	pCi/g	2.72	Y	1001	1	2.588	IDENTIFIED	48.72	✓ UJ	
Radium-223	JNT	0.2287	0.1071	pCi/g	0.1192	Y	270.2	1	1.162	IDENTIFIED	23.7	✓ UJ	
Thallium-208	✓	0.2089	0.03213	pCi/g	0.02428	0.080	583.2	1	1.309	IDENTIFIED	7.067		
Thorium-234	✓	0.7317	0.2626	pCi/g	0.3114	0.500	92.63	1	1.095	IDENTIFIED	17.97		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701038	28-SEP-07 00:00	17-DEC-07 11:03	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.775	0.1983	pCi/g	0.1153	0.800	911	1	1.79	IDENTIFIED	11.97		
Americium-243	JNT	0.1348	0.03996	pCi/g	0.04944	Y	74.92	1	1.207	IDENTIFIED	14.68	✓ UJ	
Bismuth-212	PUNC	0.2628	0.2592	pCi/g	0.2607	0.500	726.6	1	2.075	IDENTIFIED	50.1	✓ UJ	
Bismuth-214	✓	0.6224	0.1041	pCi/g	0.06522	0.200	609.2	1	1.664	IDENTIFIED	7.482		
Cesium-137	✓	0.3229	0.04959	pCi/g	0.03644	0.100	661.5	1	1.633	IDENTIFIED	6.462		
Lead-212	✓	0.7127	0.07536	pCi/g	0.0566	0.100	238.6	1	1.24	IDENTIFIED	4.432		
Lead-214	✓	0.6791	0.1029	pCi/g	0.07905	0.100	351.8	1	1.451	IDENTIFIED	7.154		
Neptunium-237	JNT	0.2957	0.1716	pCi/g	0.2462	Y	87.26	1	1.238	IDENTIFIED	29.34	✓ UJ	
Potassium-40	✓	5.348	0.765	pCi/g	0.3681	1.00	1461	1	1.988	IDENTIFIED	6.629		
Radium-223	JNT	0.2198	0.167	pCi/g	0.1859	Y	270.6	1	1.164	IDENTIFIED	38.64	✓ UJ	
Thallium-208	✓	0.2206	0.04535	pCi/g	0.03826	0.080	583.3	1	1.229	IDENTIFIED	9.726		
Thorium-234	✓	0.6418	0.4616	pCi/g	0.4051	0.500	92.78	1	1.482	IDENTIFIED	36.5		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701039	28-SEP-07 00:00	16-DEC-07 16:47	79.7	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.6468	0.1343	pCi/g	0.07936	0.800	911.7	1	1.594	IDENTIFIED	9.503		
Americium-243	JNT	0.121	0.02686	pCi/g	0.02499	Y	74.95	1	1.121	IDENTIFIED	9.942	✓ UJ	
Bismuth-212	✓	0.5151	0.1571	pCi/g	0.1578	0.500	727.4	1	1.734	IDENTIFIED	15.1		
Bismuth-214	✓	0.248	0.06013	pCi/g	0.04411	0.200	609.7	1	1.309	IDENTIFIED	11.94		
Cesium-137	✓	0.1313	0.02452	pCi/g	0.02355	0.100	662	1	1.332	IDENTIFIED	8.893		
Lead-212	✓	0.7161	0.06295	pCi/g	0.03383	0.100	238.7	1	1.113	IDENTIFIED	3.409		
Lead-214	✓	0.3331	0.05586	pCi/g	0.04321	0.100	351.9	1	1.412	IDENTIFIED	8.093		
Neptunium-236	JNT	0.0328	0.02913	pCi/g	0.03032	Y	98.71	1	1.608	IDENTIFIED	45.06	✓ UJ	
Neptunium-237	JNT	0.4571	0.1268	pCi/g	0.112	Y	87.4	1	1.43	IDENTIFIED	12.87	✓ UJ	
Potassium-40	✓	0.8612	0.33	pCi/g	0.1922	1.00	1462	1	1.285	IDENTIFIED	19.1		
Radium-223	JNT	0.2653	0.1216	pCi/g	0.1122	Y	270	1	1.484	IDENTIFIED	23.18	✓ UJ	
Thallium-208	✓	0.1932	0.03372	pCi/g	0.02081	0.080	583.4	1	1.37	IDENTIFIED	8.324		
Thorium-234	✓	1.038	0.2937	pCi/g	0.2478	0.500	92.77	1	1.25	IDENTIFIED	13.4		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701040	28-SEP-07 00:00	16-DEC-07 16:47	79.7	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.7169	0.123	pCi/g	0.1047	0.800	911.6	1	2.074	IDENTIFIED	8.072		
Americium-243	JNJ	0.1389	0.01943	pCi/g	0.01752	Y	75.04	1	1.449	IDENTIFIED	6.239	✓ UJ	
Bismuth-212	✓	0.2885	0.26	pCi/g	0.2096	0.500	727.1	1	1.651	IDENTIFIED	45.81		
Bismuth-214	✓	0.474	0.08144	pCi/g	0.05148	0.200	609.6	1	1.703	IDENTIFIED	7.902		
Cesium-137	✓	0.187	0.03512	pCi/g	0.03202	0.100	661.8	1	1.452	IDENTIFIED	8.664		
Lead-212	✓	0.7688	0.06458	pCi/g	0.03585	0.100	238.7	1	1.504	IDENTIFIED	2.999		
Lead-214	✓	0.5455	0.06937	pCi/g	0.0481	0.100	352.1	1	1.571	IDENTIFIED	5.947		
Neptunium-237	JNJ	0.4638	0.08856	pCi/g	0.08786	Y	87.38	1	1.656	IDENTIFIED	9.022	✓ UJ	
Potassium-40	✓	3.433	0.4666	pCi/g	0.3018	1.00	1462	1	2.155	IDENTIFIED	6.359		
Protactinium-234m	NVP	4.381	2.959	pCi/g	3.272	Y	1003	1	0.7204	IDENTIFIED	34.3	✓ UJ	
Radium-223	JNJ	0.2347	0.1087	pCi/g	0.1147	Y	269.9	1	1.817	IDENTIFIED	23.48	✓ UJ	
Thallium-208	✓	0.2289	0.04291	pCi/g	0.02714	0.080	583.4	1	1.622	IDENTIFIED	8.842		
Thorium-234	✓	1.103	0.2053	pCi/g	0.2045	0.500	93	1	1.72	IDENTIFIED	8.708		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701041	28-SEP-07 00:00	17-DEC-07 11:13	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101 | GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	LA	0.4889	0.2031	pCi/g	0.3397	0.800	911.5	1	0.7892	FAIL_ABUND	20.93	✓ UI	Data rejected due to low abundance.
Americium-243	JNJ	0.1149	0.03024	pCi/g	0.03011	Y	75	1	1.692	IDENTIFIED	12.98	✓ UJ	
Bismuth-214	✓	0.4421	0.117	pCi/g	0.09134	0.200	609.5	1	1.969	IDENTIFIED	12.96		
Cesium-137	✓	0.2729	0.06087	pCi/g	0.06527	0.100	661.7	1	1.391	IDENTIFIED	10.62		
Lead-212	✓	0.3818	0.08326	pCi/g	0.0692	0.100	238.5	1	1.491	IDENTIFIED	10.7		
Lead-214	✓	0.5918	0.1094	pCi/g	0.08988	0.100	352.1	1	1.515	IDENTIFIED	9.072		
Neptunium-237	JNJ	0.3376	0.132	pCi/g	0.1471	Y	86.87	1	1.557	IDENTIFIED	19.61	✓ UJ	
Potassium-40	✓	4.297	0.9437	pCi/g	0.4816	1.00	1461	1	1.814	IDENTIFIED	10.86		
Radium-223	JNJ	0.2111	0.2182	pCi/g	0.2041	Y	269.6	1	1.888	IDENTIFIED	52.66	✓ UJ	
Thallium-208	✓	0.1403	0.0512	pCi/g	0.04942	0.080	583.7	1	1.567	IDENTIFIED	18.26		
Thorium-234	✓	0.7412	0.3076	pCi/g	0.3423	0.500	93.1	1	1.566	IDENTIFIED	20.83		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701042	28-SEP-07 00:00	17-DEC-07 11:13	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101 | GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.5319	0.2092	pCi/g	0.1567	0.800	911.2	1	2.269	IDENTIFIED	19.66		
Americium-243	JNJ	0.1055	0.03812	pCi/g	0.04441	Y	74.93	1	0.9789	IDENTIFIED	18.1	✓ UJ	
Bismuth-214	✓	0.4688	0.104	pCi/g	0.08505	0.200	609.3	1	1.142	IDENTIFIED	10.94		
Cesium-137	✓	0.1576	0.05654	pCi/g	0.03711	0.100	661.5	1	1.306	IDENTIFIED	18.07		
Lead-212	✓	0.456	0.06808	pCi/g	0.05841	0.100	238.7	1	1.111	IDENTIFIED	7.077		
Lead-214	✓	0.5418	0.105	pCi/g	0.07361	0.100	351.9	1	1.121	IDENTIFIED	9.516		
Neptunium-237	JNJ	0.5153	0.1658	pCi/g	0.1664	Y	87.26	1	1.189	IDENTIFIED	15.99	✓ UJ	
Potassium-40	✓	4.082	0.6471	pCi/g	0.2907	1.00	1460	1	1.413	IDENTIFIED	7.26		
Radium-223	NPW	0.1898	0.2277	pCi/g	0.1789	Y	270.3	1	4.794	IDENTIFIED	61.12	✓ UI	Data rejected due to high peak-width.
Thallium-208	✓	0.1263	0.04908	pCi/g	0.03842	0.080	583.2	1	1.186	IDENTIFIED	19.63		
Thorium-234	✓	1.08	0.4353	pCi/g	0.394	0.500	92.79	1	1.372	IDENTIFIED	20.25		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701043	28-SEP-07 00:00	17-DEC-07 11:24	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101 | GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.9432	0.2095	pCi/g	0.1461	0.800	911.3	1	1.3	IDENTIFIED	10.83		
Americium-243	JNJ	0.1683	0.029	pCi/g	0.03356	Y	74.87	1	0.9722	IDENTIFIED	8.172	✓ UJ	
Bismuth-212	✓	0.6529	0.3135	pCi/g	0.341	0.500	727.5	1	1.467	IDENTIFIED	24.22		
Bismuth-214	✓	0.8596	0.1279	pCi/g	0.08031	0.200	609.5	1	1.441	IDENTIFIED	6.706		
Lead-212	✓	0.8584	0.09526	pCi/g	0.05739	0.100	238.7	1	0.9473	IDENTIFIED	4.027		
Lead-214	✓	0.7591	0.1125	pCi/g	0.07955	0.100	352	1	1.038	IDENTIFIED	6.81		
Neptunium-237	JNJ	0.5173	0.1418	pCi/g	0.1687	Y	87.24	1	1.216	IDENTIFIED	13.57	✓ UJ	
Potassium-40	✓	5.016	0.8778	pCi/g	0.4787	1.00	1461	1	1.565	IDENTIFIED	8.505		
Radium-223	JNJ	0.2219	0.191	pCi/g	0.1842	Y	270.1	1	1.706	IDENTIFIED	43.76	✓ UJ	
Thallium-208	✓	0.3277	0.0515	pCi/g	0.03767	0.080	583.3	1	1.261	IDENTIFIED	7.221		

Thorium-234	✓	0.8701	0.3672	pCi/g	0.3919	0.500	92.78	1	1.158	IDENTIFIED	21.23		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701044	28-SEP-07 00:00	17-DEC-07 12:02	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.5505	0.1769	pCi/g	0.1163	0.800	911.4	1	1.395	IDENTIFIED	15.93		
Americium-243	JNT	0.163	0.04205	pCi/g	0.04405	Y	74.69	1	1.327	IDENTIFIED	12.49	✓ UJ	
Bismuth-212	✓	0.4197	0.2494	pCi/g	0.2321	0.500	727.8	1	1.223	IDENTIFIED	30.13		
Bismuth-214	✓	0.5086	0.09404	pCi/g	0.0617	0.200	609.1	1	1.555	IDENTIFIED	8.939		
Cesium-137	✓	0.05105	0.02481	pCi/g	0.03129	0.100	661.2	1	1.578	IDENTIFIED	24.6		
Lead-212	✓	0.6836	0.0689	pCi/g	0.04978	0.100	238.6	1	1.063	IDENTIFIED	4.111		
Lead-214	✓	0.6165	0.08498	pCi/g	0.06355	0.100	351.9	1	1.228	IDENTIFIED	6.384		
Neptunium-237	JNT	0.3538	0.1518	pCi/g	0.1906	Y	87.21	1	1.131	IDENTIFIED	21.46	✓ UJ	
Potassium-40	✓	4.856	0.672	pCi/g	0.2913	1.00	1461	1	2.396	IDENTIFIED	6.245		
Protactinium-234m	NP	3.984	2.951	pCi/g	3.651	Y	1000	1	1.085	IDENTIFIED	37.62	✓ UJ	
Thallium-208	✓	0.1746	0.04423	pCi/g	0.03045	0.080	583	1	1.32	IDENTIFIED	12.58		
Thorium-234	✓	0.8832	0.4053	pCi/g	0.4058	0.500	92.61	1	1.145	IDENTIFIED	23.06		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701045	28-SEP-07 00:00	17-DEC-07 12:03	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	1.066	0.2028	pCi/g	0.1214	0.800	910.9	1	1.651	IDENTIFIED	8.279		
Americium-243	JNT	0.1297	0.03515	pCi/g	0.04619	Y	74.5	1	0.9211	IDENTIFIED	13.19	✓ UJ	
Bismuth-212	✓	0.5593	0.3371	pCi/g	0.241	0.500	727.4	1	1.707	IDENTIFIED	30.51		
Bismuth-214	✓	0.4706	0.09596	pCi/g	0.07184	0.200	609	1	1.141	IDENTIFIED	9.846		
Lead-212	✓	0.7576	0.07839	pCi/g	0.05732	0.100	238.3	1	1.14	IDENTIFIED	4.257		
Lead-214	✓	0.6152	0.08994	pCi/g	0.06925	0.100	351.6	1	1.014	IDENTIFIED	6.772		
Neptunium-237	JNT	0.3448	0.1551	pCi/g	0.2129	Y	86.72	1	1.061	IDENTIFIED	22.52	✓ UJ	
Potassium-40	✓	4.894	0.7046	pCi/g	0.3475	1.00	1460	1	1.931	IDENTIFIED	6.611		
Radium-223	JNT	0.2162	0.1695	pCi/g	0.1734	Y	270.4	1	1.574	IDENTIFIED	39.87	✓ UJ	
Thallium-208	✓	0.2466	0.04823	pCi/g	0.03428	0.080	582.9	1	1.582	IDENTIFIED	9.4		
Thorium-234	✓	1.084	0.4355	pCi/g	0.3905	0.500	92.44	1	1.465	IDENTIFIED	20.07		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701046	28-SEP-07 00:00	17-DEC-07 12:03	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.7734	0.1433	pCi/g	0.1015	0.800	911.7	1	1.508	IDENTIFIED	8.825		
Americium-243	JNT	0.1187	0.02711	pCi/g	0.03335	Y	74.96	1	1.051	IDENTIFIED	11.15	✓ UJ	
Bismuth-212	✓	0.4565	0.2185	pCi/g	0.2147	0.500	727.9	1	1.788	IDENTIFIED	24.14		
Bismuth-214	✓	0.5173	0.09079	pCi/g	0.05814	0.200	609.9	1	1.415	IDENTIFIED	8.261		
Cesium-137	✓	0.0949	0.02946	pCi/g	0.02688	0.100	662.3	1	1.477	IDENTIFIED	15.41		
Lead-212	✓	0.7418	0.07185	pCi/g	0.04486	0.100	238.9	1	1.16	IDENTIFIED	3.935		
Lead-214	✓	0.5919	0.09142	pCi/g	0.05644	0.100	352.1	1	1.372	IDENTIFIED	7.363		
Neptunium-237	JNT	0.2524	0.124	pCi/g	0.1483	Y	87.33	1	1.349	IDENTIFIED	24.76	✓ UJ	
Potassium-40	✓	5.887	0.6852	pCi/g	0.2746	1.00	1462	1	1.974	IDENTIFIED	5.28		
Radium-223	JNT	0.3014	0.1291	pCi/g	0.1451	Y	270.7	1	1.239	IDENTIFIED	21.64	✓ UJ	
Thallium-208	✓	0.1939	0.03903	pCi/g	0.02847	0.080	583.5	1	1.426	IDENTIFIED	9.705		
Thorium-234	✓	0.94	0.3521	pCi/g	0.3232	0.500	93.11	1	1.289	IDENTIFIED	18.73		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701047	28-SEP-07 00:00	17-DEC-07 12:04	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	1.064	0.1785	pCi/g	0.1022	0.800	910.9	1	1.737	IDENTIFIED	6.976		
Americium-243	JNT	0.1552	0.0355	pCi/g	0.04128	Y	74.66	1	1.12	IDENTIFIED	10.99	✓ UJ	
Bismuth-212	✓	0.6934	0.2001	pCi/g	0.2105	0.500	726.7	1	1.647	IDENTIFIED	13.99		
Bismuth-214	✓	0.5748	0.08647	pCi/g	0.05456	0.200	609	1	1.596	IDENTIFIED	6.527		
Curium-243	JNT	0.08265	0.05544	pCi/g	0.08073	Y	105.4	2	1.272	IDENTIFIED	34.03	✓ UJ	

Europium-155 JNT	0.09197	0.0617	pCi/g	0.09181	0.500	105.4	2	1.272	IDENTIFIED	34.03	☑ UJ	
Lead-212 ✓	1.066	0.08631	pCi/g	0.04847	0.100	238.4	1	1.344	IDENTIFIED	2.848	☐	
Lead-214 ✓	0.7327	0.08387	pCi/g	0.05526	0.100	351.5	1	1.582	IDENTIFIED	5.085	☐	
Neptunium-237 JNT	0.5009	0.1408	pCi/g	0.173	Y	87.08	1	1.191	IDENTIFIED	13.67	☑ UJ	
✓ Potassium-40 APW 12/17/07	6.323	0.6852	pCi/g	0.2682	1.00	1461	1	3.036	IDENTIFIED	4.683	☑ ~~UI Data rejected due to high peak-width.~~	12/17/07
Radium-223 JNT	0.1605	0.1766	pCi/g	0.1494	Y	270.1	1	1.656	IDENTIFIED	56.06	☑ UJ	
Thallium-208 ✓	0.3105	0.04258	pCi/g	0.02839	0.080	582.9	1	1.741	IDENTIFIED	5.83	☐	
Thorium-234 ✓	1.306	0.4179	pCi/g	0.3798	0.500	92.52	1	1.482	IDENTIFIED	15.79	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701048	28-SEP-07 00:00	17-DEC-07 12:04	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228 ✓	0.7255	0.1733	pCi/g	0.1285	0.800	911.5	1	1.774	IDENTIFIED	11.36	☐	
Americium-243 JNT	0.167	0.0487	pCi/g	0.04155	Y	75.15	1	2.032	IDENTIFIED	14.41	☑ UJ	
Bismuth-212 ✓	0.5081	0.2266	pCi/g	0.2751	0.500	727.7	1	1.986	IDENTIFIED	22.39	☐	
Bismuth-214 ✓	0.5009	0.1057	pCi/g	0.06609	0.200	609.5	1	1.87	IDENTIFIED	10.11	☐	
Cesium-137 ✓	0.08796	0.03134	pCi/g	0.03478	0.100	661.7	1	1.793	IDENTIFIED	17.76	☐	
Lead-212 ✓	0.7803	0.08307	pCi/g	0.05419	0.100	238.6	1	1.615	IDENTIFIED	4.448	☐	
Lead-214 ✓	0.5478	0.08637	pCi/g	0.06791	0.100	351.8	1	1.526	IDENTIFIED	7.471	☐	
Neptunium-237 JNT	0.3827	0.145	pCi/g	0.2133	Y	87.17	1	1.544	IDENTIFIED	18.88	☑ UJ	
Potassium-40 ✓	3.449	0.6094	pCi/g	0.3003	1.00	1461	1	2.168	IDENTIFIED	8.576	☐	
Thallium-208 ✓	0.2139	0.04581	pCi/g	0.03217	0.080	583.4	1	1.705	IDENTIFIED	10.31	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701049	28-SEP-07 00:00	17-DEC-07 12:05	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name ✓	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	0.7637	0.1388	pCi/g	0.0943	0.800	911.4	1	1.444	IDENTIFIED	8.285	☐	
Americium-243 JNT	0.132	0.03843	pCi/g	0.03661	Y	74.75	1	1.675	IDENTIFIED	14.48	☑ UJ	
Bismuth-212 ✓	0.374	0.197	pCi/g	0.196	0.500	727.8	1	1.426	IDENTIFIED	26.53	☐	
Bismuth-214 ✓	0.5297	0.08258	pCi/g	0.05512	0.200	609.3	1	1.393	IDENTIFIED	6.961	☐	
Cesium-137 ✓	0.05001	0.0216	pCi/g	0.02733	0.100	661.7	1	1.197	IDENTIFIED	21.63	☐	
Lead-212 ✓	0.6996	0.06081	pCi/g	0.04561	0.100	238.7	1	1.044	IDENTIFIED	3.439	☐	
Lead-214 ✓	0.6368	0.07134	pCi/g	0.05438	0.100	351.8	1	1.152	IDENTIFIED	5.084	☐	
Neptunium-237 JNT	0.4269	0.1241	pCi/g	0.1643	Y	87.23	1	1.305	IDENTIFIED	14.36	☑ UJ	
Potassium-40 ✓	5.37	0.602	pCi/g	0.2345	1.00	1461	1	1.905	IDENTIFIED	4.849	☐	
Radium-223 JNT	0.177	0.1398	pCi/g	0.1399	Y	270.4	1	1.185	IDENTIFIED	40.19	☑ UJ	
Thallium-208 ✓	0.2285	0.03774	pCi/g	0.02822	0.080	583.3	1	1.352	IDENTIFIED	7.584	☐	
Thorium-234 ✓	0.9495	0.3021	pCi/g	0.3608	0.500	92.82	1	1.293	IDENTIFIED	15.83	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701050	28-SEP-07 00:00	17-DEC-07 12:06	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name ✓	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	0.8727	0.1876	pCi/g	0.1084	0.800	911.7	1	1.668	IDENTIFIED	9.653	☐	
Americium-243 JNT	0.1472	0.04226	pCi/g	0.04524	Y	74.97	1	1.521	IDENTIFIED	14.29	☑ UJ	
Americium-246 APW	0.1748	0.1576	pCi/g	0.1105	Y	1080	1	7.075	IDENTIFIED	45.84	☑ UI	Data rejected due to high peak-width.
Bismuth-212 ✓	0.8766	0.3577	pCi/g	0.2296	0.500	728.5	1	2.54	IDENTIFIED	20.35	☐	
Bismuth-214 ✓	0.4086	0.09735	pCi/g	0.06536	0.200	609.6	1	1.456	IDENTIFIED	11.54	☐	
Californium-249 APW	0.03458	0.03652	pCi/g	0.0344	Y	388.1	1	5.151	IDENTIFIED	53.81	☑ UI	Data rejected due to high peak-width.
Lead-212 ✓	0.7502	0.0756	pCi/g	0.05322	0.100	238.7	1	1.307	IDENTIFIED	4.066	☐	
Lead-214 ✓	0.5849	0.08449	pCi/g	0.05891	0.100	352	1	1.612	IDENTIFIED	6.73	☐	
Neptunium-237 JNT	0.4418	0.1654	pCi/g	0.1819	Y	87.39	1	1.543	IDENTIFIED	18.79	☑ UJ	
Potassium-40 ✓	3.087	0.5223	pCi/g	0.2869	1.00	1462	1	2.017	IDENTIFIED	8.053	☐	
Radium-223 JNT	0.1986	0.15	pCi/g	0.1595	Y	269.9	1	1.669	IDENTIFIED	38.41	☑ UJ	
Thallium-208 ✓	0.2384	0.04872	pCi/g	0.03343	0.080	583.6	1	1.493	IDENTIFIED	9.748	☐	
Thorium-234 ✓	0.8181	0.3819	pCi/g	0.3946	0.500	92.8	1	1.342	IDENTIFIED	23.59	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701051	28-SEP-07 00:00	17-DEC-07 12:07	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	0.8225	0.1442	pCi/g	0.07885	0.800	911.5	1	1.465	IDENTIFIED	7.619		
Americium-243	0.1393	0.02845	pCi/g	0.03285	Y	74.95	1	1.173	IDENTIFIED	8.889		
Bismuth-212	0.4622	0.177	pCi/g	0.1758	0.500	728.1	1	1.064	IDENTIFIED	19.17		
Bismuth-214	0.6707	0.08353	pCi/g	0.04885	0.200	609.5	1	1.486	IDENTIFIED	5.462		
Cesium-137	0.02761	0.02718	pCi/g	0.02468	0.100	662.6	1	1.088	IDENTIFIED	50.12		
Lead-212	0.7368	0.06449	pCi/g	0.04217	0.100	238.6	1	1.103	IDENTIFIED	3.385		
Lead-214	0.7681	0.08381	pCi/g	0.05009	0.100	352	1	1.408	IDENTIFIED	4.828		
Neptunium-237	0.3616	0.1254	pCi/g	0.146	Y	87.29	1	1.388	IDENTIFIED	16.68		
Potassium-40	4.802	0.5991	pCi/g	0.2129	1.00	1461	1	1.785	IDENTIFIED	4.78		
Radium-223	0.2829	0.09633	pCi/g	0.1363	Y	270.2	1	1.873	IDENTIFIED	17.1		
Thallium-208	0.2234	0.04144	pCi/g	0.02268	0.080	583.3	1	1.527	IDENTIFIED	8.922		
Thorium-234	0.8109	0.2721	pCi/g	0.3222	0.500	92.77	1	1.229	IDENTIFIED	16.26		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701052	28-SEP-07 00:00	17-DEC-07 12:02	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	0.5914	0.1778	pCi/g	0.1312	0.800	911.6	1	1.858	IDENTIFIED	14.56		
Americium-243	0.1522	0.0472	pCi/g	0.04612	Y	75.03	1	1.765	IDENTIFIED	15.32		
Bismuth-212	0.5564	0.2444	pCi/g	0.2434	0.500	727.5	1	1.75	IDENTIFIED	22.03		
Bismuth-214	0.5113	0.08986	pCi/g	0.06796	0.200	609.4	1	1.766	IDENTIFIED	8.19		
Cesium-137	0.0696	0.03758	pCi/g	0.0281	0.100	662.3	1	1.572	IDENTIFIED	27.28		
Lead-212	0.674	0.07335	pCi/g	0.05686	0.100	238.7	1	1.465	IDENTIFIED	4.354		
Lead-214	0.5826	0.09573	pCi/g	0.06249	0.100	351.8	1	1.335	IDENTIFIED	7.77		
Neptunium-237	0.4125	0.1688	pCi/g	0.1999	Y	87.32	1	1.647	IDENTIFIED	20.45		
Potassium-40	3.522	0.5676	pCi/g	0.2894	1.00	1461	1	1.697	IDENTIFIED	7.691		
Thallium-208	0.1913	0.04628	pCi/g	0.03246	0.080	583.3	1	1.547	IDENTIFIED	11.82		
Thorium-234	0.7464	0.3912	pCi/g	0.4322	0.500	92.96	1	1.656	IDENTIFIED	26.46		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701053	28-SEP-07 00:00	16-DEC-07 16:48	79.7	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	0.657	0.1351	pCi/g	0.08336	0.800	910.6	1	1.869	IDENTIFIED	9.248		
Americium-243	0.1313	0.02997	pCi/g	0.02733	Y	74.65	1	1.216	IDENTIFIED	10.97		
Bismuth-212	0.5302	0.1925	pCi/g	0.169	0.500	726.8	1	1.515	IDENTIFIED	17.94		
Bismuth-214	0.2298	0.06847	pCi/g	0.04595	0.200	608.8	1	1.691	IDENTIFIED	14.66		
Lead-212	0.6518	0.06139	pCi/g	0.03575	0.100	238.4	1	1.236	IDENTIFIED	3.761		
Lead-214	0.3355	0.0539	pCi/g	0.04337	0.100	351.7	1	1.428	IDENTIFIED	7.677		
Neptunium-237	0.3731	0.1067	pCi/g	0.1326	Y	86.96	1	1.15	IDENTIFIED	13.94		
Potassium-40	0.4631	0.2884	pCi/g	0.217	1.00	1460	1	2.557	IDENTIFIED	31.64		
Protactinium-234m	3.361	3.057	pCi/g	2.45	Y	1001	1	1.218	IDENTIFIED	46.19		
Thallium-208	0.1606	0.03082	pCi/g	0.02342	0.080	582.8	1	1.658	IDENTIFIED	8.992		
Thorium-234	0.61	0.3743	pCi/g	0.284	0.500	92.5	1	1.446	IDENTIFIED	31.03		

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701054	28-SEP-07 00:00	17-DEC-07 12:36	80.5	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	0.7742	0.1943	pCi/g	0.1391	0.800	911.5	1	1.77	IDENTIFIED	11.82		
Americium-243	0.1229	0.0496	pCi/g	0.05704	Y	74.62	1	1.415	IDENTIFIED	20.03		
Bismuth-212	0.6384	0.2935	pCi/g	0.2713	0.500	727.5	1	1.959	IDENTIFIED	23.15		
Bismuth-214	0.4218	0.09614	pCi/g	0.06988	0.200	609.3	1	1.612	IDENTIFIED	11.15		
Cesium-137	0.08576	0.03894	pCi/g	0.03384	0.100	661.8	1	1.418	IDENTIFIED	22.92		
Lead-212	0.7184	0.09871	pCi/g	0.05774	0.100	238.6	1	1.4	IDENTIFIED	4.808		
Lead-214	0.6035	0.1006	pCi/g	0.06666	0.100	351.8	1	1.674	IDENTIFIED	7.658		
Neptunium-237	0.5023	0.1765	pCi/g	0.2201	Y	87.28	1	1.191	IDENTIFIED	17.32		
Potassium-40	3.447	0.5665	pCi/g	0.2863	1.00	1461	1	2.306	IDENTIFIED	7.787		
Protactinium-234m	3.906	3.241	pCi/g	3.718	Y	1001	1	2.375	IDENTIFIED	42.09		

Radium-223	JNT	0.3568	0.1638	pCi/g	0.1778	Y	269.8	1	2.246	IDENTIFIED	22.91	☑	UJ
Thallium-208	✓	0.2456	0.04515	pCi/g	0.0305	0.080	583.3	1	1.592	IDENTIFIED	8.786	☐	
Thorium-234	✓	0.7155	0.4205	pCi/g	0.4628	0.500	92.56	1	1.242	IDENTIFIED	29.64	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701055	28-SEP-07 00:00	17-DEC-07 14:29	80.6	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.7347	0.2129	pCi/g	0.169	0.800	911.6	1	1.566	IDENTIFIED	14.05	☐	
Americium-243	JNT	0.1565	0.03809	pCi/g	0.03592	Y	74.58	1	1.464	IDENTIFIED	11.73	☑	UJ
Bismuth-212	APW	0.3943	0.4203	pCi/g	0.3522	0.500	726.6	1	4.852	IDENTIFIED	54.21	☑	UI Data rejected due to high peak-width.
Bismuth-214	LA	0.4445	0.1125	pCi/g	0.1778	0.200	609.4	1	1.748	FAIL_ABUND	12.36	☑	UI Data rejected due to low abundance.
Cesium-137	APW	0.06815	0.07039	pCi/g	0.04955	0.100	663.1	1	8.743	IDENTIFIED	52.54	☑	UI Data rejected due to high peak-width.
Lead-212	✓	0.5434	0.08217	pCi/g	0.07058	0.100	238.7	1	1.219	IDENTIFIED	6.465	☐	
Lead-214	✓	0.4809	0.1151	pCi/g	0.09208	0.100	352	1	1.56	IDENTIFIED	11.89	☐	
Neptunium-237	JNT	0.4522	0.1656	pCi/g	0.1849	Y	86.83	1	1.525	IDENTIFIED	18.17	☑	UJ
Potassium-40	✓	4.499	0.8962	pCi/g	0.4279	1.00	1461	1	1.948	IDENTIFIED	9.354	☐	
Thallium-208	✓	0.172	0.0553	pCi/g	0.04595	0.080	583.4	1	1.265	IDENTIFIED	16	☐	
Thorium-234	✓	0.5171	0.3753	pCi/g	0.4313	0.500	92.6	1	1.18	IDENTIFIED	36.76	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
198701056	28-SEP-07 00:00	17-DEC-07 14:29	80.6	SAMPLE	LOAD	1	SCAN	SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	LA	0.6055	0.2287	pCi/g	0.3432	0.800	911.5	1	1.761	FAIL_ABUND	19.02	☑	UI Data rejected due to low abundance.
Americium-243	JNT	0.08421	0.02889	pCi/g	0.03472	Y	74.98	1	1.07	IDENTIFIED	17.05	☑	UJ
Bismuth-214	✓	0.3981	0.1389	pCi/g	0.1157	0.200	609.4	1	1.599	IDENTIFIED	17.41	☐	
Lead-212	✓	0.3807	0.07702	pCi/g	0.07301	0.100	238.7	1	1.093	IDENTIFIED	9.762	☐	
Lead-214	✓	0.4103	0.1006	pCi/g	0.0982	0.100	351.9	1	1.42	IDENTIFIED	12.23	☐	
Neptunium-237	JNT	0.3692	0.153	pCi/g	0.1784	Y	87.26	1	1.028	IDENTIFIED	20.77	☑	UJ
Potassium-40	✓	3.096	0.8776	pCi/g	0.5631	1.00	1462	1	2.362	IDENTIFIED	14.19	☐	
Thallium-208	LA	0.09505	0.06767	pCi/g	0.08622	0.080	583.6	1	1.51	FAIL_ABUND	36.15	☑	UI Data rejected due to low abundance.

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473846		17-DEC-07 14:30	0	MB	LOAD	1		GEL	N	RGSP

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473847	28-SEP-07 00:00	17-DEC-07 14:31	80.6	DUP	LOAD	1		SCAN00101|GEL	N	RGSP

Name		Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	✓	0.6809	0.1804	pCi/g	0.1731	0.800	911.5	1	1.651	IDENTIFIED	13.09	☐	
Americium-243	JNT	0.1332	0.03053	pCi/g	0.02923	Y	74.95	1	1.86	IDENTIFIED	11.17	☑	UJ
Bismuth-212	✓	0.4311	0.2768	pCi/g	0.3463	0.500	727.1	1	1.169	IDENTIFIED	32.51	☐	
Bismuth-214	✓	0.7867	0.1241	pCi/g	0.0873	0.200	609.4	1	1.691	IDENTIFIED	7.095	☐	
Cesium-137	✓	0.1926	0.05367	pCi/g	0.04965	0.100	661.9	1	1.601	IDENTIFIED	13.62	☐	
Lead-212	✓	0.7005	0.07686	pCi/g	0.05972	0.100	238.7	1	1.463	IDENTIFIED	4.686	☐	
Lead-214	✓	0.8421	0.1139	pCi/g	0.07827	0.100	352.1	1	1.569	IDENTIFIED	6.396	☐	
Neptunium-237	JNT	0.2975	0.113	pCi/g	0.1866	Y	87.23	1	1.328	IDENTIFIED	19.02	☑	UJ
Potassium-40	✓	4.034	0.6921	pCi/g	0.3421	1.00	1461	1	2.601	IDENTIFIED	8.304	☐	
Thallium-208	✓	0.19	0.05541	pCi/g	0.03764	0.080	583.4	1	1.575	IDENTIFIED	14.43	☐	
Thorium-234	✓	0.744	0.3073	pCi/g	0.4334	0.500	92.98	1	1.155	IDENTIFIED	20.73	☐	

*** = Number of isotopes identified with a keyline at this energy.

Sample ID	Collect Date	Run Date	Days Past	Sample Type	Status	Instance	Client	Project Quals	Zero?	queue
1201473848		17-DEC-07 15:07	0	LCS	LOAD	1		GEL	N	RGSP

Name	Result	Uncert.	Units	MDA	RDL	Energy	***	FWHM	Comb Act Rpt	Err(%)	Qual	Qual Comment
Actinium-228	0.9325	0.5369	pCi/g	0.5772	0.800	911.2	1	1.591	IDENTIFIED	29.05	☐	
Americium-241	13.53	1.044	pCi/g	0.4305	0.200	59.43	1	0.9949	IDENTIFIED	2.307	☐	
Americium-243	0.2391	0.1001	pCi/g	0.1437	Y	74.79	1	1.02	IDENTIFIED	21.09	☐	
Bismuth-214	0.7066	0.1969	pCi/g	0.317	0.200	609.2	1	1.296	FAIL_ABUND	13.76	☐	
Cesium-137	5.84	0.5051	pCi/g	0.1192	0.100	661.6	1	1.277	IDENTIFIED	2.227	☐	

Cobalt-60	**8.172**	0.5472	pCi/g	**0.1235**	**0.100**	1173	1	1.607	IDENTIFIED	2.142	
Gross Gamma	**39.09**	5.592	pCi/g	**6.647**	**N**		0				
Lead-212	**0.8719**	0.1537	pCi/g	**0.1713**	**0.100**	238.4	1	0.9922	IDENTIFIED	8.501	
Lead-214	**0.8395**	0.2011	pCi/g	**0.1862**	**0.100**	351.9	1	1.219	IDENTIFIED	11.91	
Neptunium-237	**29.49**	2.313	pCi/g	**0.7375**	**Y**	87.95	1	0.882	IDENTIFIED	1.511	
Polonium-209	**228**	40.42	pCi/g	**31.32**	**Y**	898.1	1	1.716	IDENTIFIED	7.88	
Potassium-40	**1.319**	0.6669	pCi/g	**0.7855**	**1.00**	1462	1	1.792	IDENTIFIED	25.56	
Thallium-208	**0.4294**	0.1162	pCi/g	**0.09793**	**0.080**	583.1	1	1.49	IDENTIFIED	13.38	

*** = Number of isotopes identified with a keyline at this energy.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 15:03:35.73

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701037.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:03:12
Sample ID        : G198701037           Sample quantity  : 1.45940E+02 GRAM
Detector name    : GAM11                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.14  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.76*	77	367	0.97	92.98	89	8	5.37E-03	48.1	
2	0	52.73	63	290	1.28	104.94	102	7	4.35E-03	46.8	
3	0	57.02	39	280	1.46	113.53	111	6	2.68E-03	70.4	
4	0	63.09*	5	420	0.75	125.67	123	7	3.60E-04	711.9	
5	4	74.74*	430	436	0.93	149.00	144	16	2.99E-02	9.3	2.02E+00
6	4	77.03*	612	329	0.91	153.57	144	16	4.25E-02	6.3	
7	5	84.26*	88	326	1.23	168.04	165	13	6.13E-03	35.4	9.00E-01
8	5	87.15*	245	402	1.01	173.83	165	13	1.70E-02	14.9	
9	0	89.69	76	405	0.98	178.91	177	6	5.28E-03	43.3	
10	5	92.63*	227	380	1.09	184.81	182	14	1.57E-02	18.0	2.39E+00
11	0	99.32*	63	362	1.13	198.20	195	8	4.40E-03	56.5	
12	0	105.46	125	377	2.46	210.48	206	9	8.70E-03	29.4	
13	2	111.30	38	274	1.00	222.18	215	14	2.64E-03	71.0	4.79E+00
14	2	113.02	42	336	1.10	225.62	215	14	2.94E-03	72.6	
15	0	129.09	57	341	1.53	257.78	255	7	3.97E-03	55.4	
16	0	143.83*	27	444	1.30	287.28	282	9	1.87E-03	148.0	
17	0	154.29*	9	296	0.92	308.23	305	6	6.27E-04	319.7	
18	0	185.88*	341	401	1.09	371.46	367	10	2.37E-02	13.1	
19	0	209.07	110	392	1.24	417.87	414	9	7.62E-03	34.0	
20	0	226.20	42	223	0.98	452.17	450	7	2.95E-03	60.0	
21	3	238.56*	1223	223	0.93	476.90	472	19	8.49E-02	3.6	1.83E+00
22	3	241.75	380	277	1.43	483.29	472	19	2.64E-02	9.9	
23	0	270.20	125	232	1.16	540.24	536	9	8.68E-03	23.7	
24	0	295.10*	508	231	0.99	590.08	586	8	3.53E-02	6.8	
25	0	299.79	80	257	1.04	599.48	595	10	5.58E-03	39.0	
26	0	327.63	92	182	1.32	655.20	651	9	6.42E-03	28.3	
27	0	338.16*	270	183	1.10	676.26	671	9	1.88E-02	11.2	
28	0	351.87*	1018	257	1.13	703.71	697	13	7.07E-02	4.6	
29	0	463.07	92	104	1.49	926.28	921	10	6.39E-03	23.4	
30	0	510.98*	206	134	1.94	1022.16	1014	18	1.43E-02	18.8	
31	0	554.20	13	85	1.17	1108.66	1102	9	8.88E-04	135.6	
32	0	583.21*	387	80	1.31	1166.73	1162	10	2.69E-02	7.1	
33	0	609.27*	712	175	1.26	1218.87	1212	14	4.94E-02	5.6	
34	0	661.71	357	69	1.18	1323.83	1319	10	2.48E-02	6.9	
35	0	666.33	22	69	0.84	1333.08	1329	9	1.49E-03	72.3	
36	0	679.86	25	24	1.33	1360.17	1357	6	1.72E-03	37.2	
37	0	727.27	101	88	1.12	1455.03	1449	13	6.99E-03	21.6	
38	0	748.14	43	56	4.60	1496.80	1492	12	3.02E-03	37.2	

Sample ID : G198701037 Acquisition date : 17-DEC-2007 11:03:12

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	768.54	50	120	1.56	1537.64	1531	12	3.49E-03	45.8	
40	0	794.86	67	64	2.06	1590.31	1583	15	4.66E-03	28.7	
41	0	806.66*	16	80	1.38	1613.93	1607	11	1.13E-03	114.5	
42	0	840.60	32	64	1.76	1681.84	1676	9	2.26E-03	48.0	
43	0	861.04	75	60	1.62	1722.75	1716	15	5.21E-03	25.3	
44	0	911.43*	288	50	1.33	1823.59	1817	15	2.00E-02	8.3	
45	0	934.23	50	47	0.98	1869.20	1864	11	3.48E-03	30.0	
46	1	964.99*	48	40	1.75	1930.76	1923	21	3.30E-03	32.3	2.21E+00
47	1	969.07*	159	36	1.75	1938.92	1923	21	1.10E-02	11.4	
48	0	993.35	38	44	5.81	1987.51	1980	16	2.61E-03	42.7	
49	5	1001.29*	37	48	2.59	2003.41	1996	45	2.56E-03	48.7	1.71E+00
50	5	1007.18	26	48	2.59	2015.18	1996	45	1.80E-03	63.8	
51	5	1018.58	24	18	1.62	2038.00	1996	45	1.67E-03	30.0	
52	0	1095.42	22	31	0.88	2191.76	2187	10	1.56E-03	50.3	
53	0	1120.71	159	70	1.77	2242.36	2236	16	1.10E-02	14.3	
54	0	1212.70	32	27	2.55	2426.44	2421	11	2.22E-03	36.3	
55	0	1238.86	41	75	1.01	2478.77	2475	12	2.87E-03	45.3	
56	0	1378.07	73	14	2.34	2757.31	2752	13	5.07E-03	15.6	
57	0	1409.03	21	46	1.06	2819.27	2812	14	1.48E-03	70.8	
58	0	1428.51	7	25	3.53	2858.23	2849	14	4.97E-04	151.6	
59	3	1460.99*	408	13	2.07	2923.23	2915	23	2.83E-02	5.5	1.44E+00
60	3	1466.58	19	0	2.21	2934.40	2915	23	1.32E-03	27.5	
61	0	1510.76	21	32	1.14	3022.81	3016	14	1.48E-03	60.1	
62	0	1622.69	21	27	0.91	3246.72	3238	17	1.44E-03	63.6	
63	0	1631.27	20	14	1.34	3263.90	3259	12	1.37E-03	45.0	
64	0	1642.57	16	7	3.82	3286.50	3281	10	1.09E-03	41.2	
65	0	1730.02	50	16	2.11	3461.46	3454	13	3.45E-03	22.0	
66	0	1764.79*	163	10	2.26	3531.02	3521	16	1.13E-02	9.5	
67	0	1793.03	6	14	3.37	3587.52	3575	14	4.48E-04	128.8	
68	0	1816.76	5	10	0.53	3634.98	3627	9	3.26E-04	135.1	
69	0	1842.26	20	8	4.76	3685.99	3678	16	1.41E-03	38.2	
70	0	1848.42	16	9	1.55	3698.31	3694	9	1.11E-03	42.0	
71	0	1929.99	21	3	3.61	3861.49	3854	14	1.43E-03	29.3	
72	0	1960.48	5	4	0.85	3922.49	3917	9	3.78E-04	80.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701037       *
* Acquisition date : 17-DEC-2007 11:03:12 Detector SN#    :                 *
* Detector ID      : GAM11                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.14     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701037           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4594E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-OCT-2007 15:05:44 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.888E+00	4.980E-01	2.798E-01	0.000E+00
CS-137	2.139E-01	3.295E-02	2.232E-02	0.000E+00
EU-155	1.018E-01	5.889E-02	6.225E-02	0.000E+00
TL-208	2.089E-01	3.213E-02	2.428E-02	0.000E+00
BI-212	4.706E-01	2.029E-01	1.782E-01	0.000E+00
PB-212	6.484E-01	5.896E-02	3.812E-02	0.000E+00
BI-214	7.304E-01	9.436E-02	4.645E-02	0.000E+00
PB-214	8.247E-01	8.721E-02	4.902E-02	0.000E+00
RA-223	2.287E-01	1.071E-01	1.192E-01	0.000E+00
AC-228	7.523E-01	1.386E-01	8.794E-02	0.000E+00
PA-234M	3.223E+00	3.087E+00	2.720E+00	0.000E+00
TH-234	7.317E-01	2.626E-01	3.114E-01	0.000E+00
U-235	4.262E-02	1.236E-01	1.402E-01	0.000E+00
NP-236	2.827E-02	3.137E-02	3.119E-02	0.000E+00
NP-237	3.574E-01	1.078E-01	1.389E-01	0.000E+00
NP-239	8.733E-02	1.028E-01	1.512E-01	0.000E+00
AM-243	1.332E-01	2.584E-02	2.996E-02	0.000E+00
CM-243	9.145E-02	5.293E-02	5.807E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	-3.719E-03	1.658E-02	2.735E-02	0.000E+00	NOT IDENT.
RH-101	1.090E-03	1.556E-02	2.552E-02	0.000E+00	NOT IDENT.
SB-125	-5.133E-04	3.800E-02	6.705E-02	0.000E+00	NOT IDENT.
PO-209	-1.073E+00	2.784E+00	4.659E+00	0.000E+00	NOT IDENT.
BI-211	-1.849E-01	3.935E-01	6.604E-01	0.000E+00	NOT IDENT.
PA-233	1.171E-02	2.607E-02	4.520E-02	0.000E+00	NOT IDENT.
AM-241	-1.943E-02	5.546E-02	7.456E-02	0.000E+00	NOT IDENT.
AM-246	1.838E-02	5.290E-02	9.324E-02	0.000E+00	NOT IDENT.
CF-249	1.106E-03	1.594E-02	2.849E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 15:03:36.78

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701037.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:03:12
Sample ID        : G198701037           Sample quantity  : 1.45940E+02 GRAM
Detector name    : GAM11                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.14  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	408	10.66*	1.266E+00	3.888E+00	3.888E+00	13.07
CS-137	661.66	357	85.10*	2.532E+00	2.128E-01	2.139E-01	15.72
EU-155	105.31	125	21.20*	7.700E+00	9.868E-02	1.018E-01	59.05
TL-208	277.36	------	6.31	5.036E+00	------	Line Not Found	------
	510.77	206	22.60	3.147E+00	3.727E-01	3.727E-01	38.12
	583.19	387	84.50*	2.820E+00	2.089E-01	2.089E-01	15.70
	763.13	------	1.81	2.235E+00	------	Line Not Found	------
	860.56	75	12.42	2.006E+00	3.872E-01	3.872E-01	51.34
BI-212	727.33	101	11.80*	2.332E+00	4.706E-01	4.706E-01	43.99
	785.37	------	1.10	2.178E+00	------	Line Not Found	------
	1620.50	------	1.49	1.176E+00	------	Line Not Found	------
PB-212	74.81	430	10.40	6.092E+00	8.734E-01	8.734E-01	19.79
	77.11	612	17.50	6.323E+00	7.111E-01	7.111E-01	14.27
	87.30	245	7.81	7.096E+00	5.675E-01	5.675E-01	30.78
	238.63	1223	43.30*	5.600E+00	6.484E-01	6.484E-01	9.28
	300.09	80	3.28	4.759E+00	6.617E-01	6.617E-01	78.21
BI-214	609.31	712	46.10*	2.718E+00	7.303E-01	7.304E-01	13.18
	768.36	50	4.94	2.221E+00	5.894E-01	5.895E-01	91.95
	806.17	16	1.22	2.127E+00	8.035E-01	8.036E-01	229.20
	934.06	50	3.03	1.863E+00	1.141E+00	1.141E+00	60.60
	1120.29	159	15.10	1.582E+00	8.540E-01	8.540E-01	29.34
	1155.19	------	1.63	1.540E+00	------	Line Not Found	------
	1238.11	41	5.79	1.449E+00	6.325E-01	6.325E-01	90.89
	1280.96	------	1.43	1.408E+00	------	Line Not Found	------
	1377.67	73	4.00	1.326E+00	1.771E+00	1.772E+00	31.93
	1401.50	------	1.27	1.308E+00	------	Line Not Found	------
	1407.98	21	2.15	1.303E+00	9.757E-01	9.757E-01	141.77
	1509.23	21	2.11	1.235E+00	1.049E+00	1.049E+00	120.48
	1729.60	50	2.92	1.128E+00	1.937E+00	1.937E+00	44.38
	1764.49	163	15.40	1.115E+00	1.221E+00	1.222E+00	19.87
PB-214	74.81	430	6.44	6.092E+00	1.410E+00	1.411E+00	19.79
	77.11	612	10.80	6.323E+00	1.152E+00	1.152E+00	14.27

Sample ID : G198701037 Acquisition date : 17-DEC-2007 11:03:12

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	245	4.84	7.096E+00	9.157E-01	9.158E-01	30.78
	242.00	380	7.43	5.549E+00	1.186E+00	1.186E+00	20.58
	295.22	508	19.30	4.815E+00	7.030E-01	7.031E-01	14.90
	351.93	1018	37.60*	4.222E+00	8.247E-01	8.247E-01	10.79
RA-223	269.46	125	13.70*	5.132E+00	2.287E-01	2.287E-01	47.79
AC-228	129.07	57	2.42	7.653E+00	3.969E-01	3.969E-01	110.88
	209.25	110	3.89	6.111E+00	5.932E-01	5.932E-01	68.18
	270.25	125	3.46	5.132E+00	9.057E-01	9.057E-01	47.79
	338.32	270	11.27	4.351E+00	7.089E-01	7.089E-01	23.15
	409.46	------	1.92	3.757E+00	------ Line Not Found		------
	463.00	92	4.40	3.408E+00	7.885E-01	7.885E-01	47.23
	794.95	67	4.25	2.155E+00	9.426E-01	9.426E-01	57.93
	911.20	288	25.80*	1.905E+00	7.523E-01	7.523E-01	18.80
	964.77	48	4.99	1.809E+00	6.768E-01	6.768E-01	65.05
	968.97	159	15.80	1.802E+00	7.184E-01	7.184E-01	24.26
	1588.20	------	3.22	1.192E+00	------ Line Not Found		------
PA-234M	1001.03	37	0.84*	1.750E+00	3.223E+00	3.223E+00	97.75
TH-234	63.29	5	4.80	4.564E+00	3.040E-02	3.040E-02	1423.79
	92.58	227	5.41*	7.367E+00	7.317E-01	7.317E-01	36.62
U-235	143.76	27	10.96*	7.421E+00	4.262E-02	4.262E-02	295.98
NP-236	98.44	63	38.00*	7.586E+00	2.827E-02	2.827E-02	113.23
NP-237	86.48	245	12.40*	7.096E+00	3.574E-01	3.574E-01	30.78
NP-239	228.18	42	10.76*	5.805E+00	8.733E-02	8.733E-02	120.15
AM-243	74.66	430	68.20*	6.092E+00	1.332E-01	1.332E-01	19.79
CM-243	103.76	125	23.00*	7.700E+00	9.096E-02	9.145E-02	59.05

Flag: "*" = Keyline

Sample ID : G198701037 Acquisition date : 17-DEC-2007 11:03:12

Total number of lines in spectrum 72
Number of unidentified lines 31
Number of lines tentatively identified by NID 41 56.94%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.888E+00	3.888E+00	0.508E+00	13.07	
CS-137	9.47E+08S	1.01	2.128E-01	2.139E-01	0.336E-01	15.72	
EU-155	1.57E+08S	1.03	9.868E-02	1.018E-01	0.601E-01	59.05	
TL-208	4.43E+17S	1.00	2.089E-01	2.089E-01	0.328E-01	15.70	
BI-212	4.43E+17S	1.00	4.706E-01	4.706E-01	2.070E-01	43.99	
PB-212	4.43E+17S	1.00	6.484E-01	6.484E-01	0.602E-01	9.28	
BI-214	5.05E+10S	1.00	7.303E-01	7.304E-01	0.963E-01	13.18	
PB-214	5.05E+10S	1.00	8.247E-01	8.247E-01	0.890E-01	10.79	
RA-223	1.04E+12S	1.00	2.287E-01	2.287E-01	1.093E-01	47.79	
AC-228	4.43E+17S	1.00	7.523E-01	7.523E-01	1.414E-01	18.80	
PA-234M	1.41E+17S	1.00	3.223E+00	3.223E+00	3.150E+00	97.75	
TH-234	1.41E+17S	1.00	7.317E-01	7.317E-01	2.680E-01	36.62	
U-235	2.22E+16S	1.00	4.262E-02	4.262E-02	12.61E-02	295.98	
NP-236	4.89E+12S	1.00	2.827E-02	2.827E-02	3.201E-02	113.23	
NP-237	6.75E+13S	1.00	3.574E-01	3.574E-01	1.100E-01	30.78	
NP-239	2.33E+11S	1.00	8.733E-02	8.733E-02	10.49E-02	120.15	
AM-243	2.33E+11S	1.00	1.332E-01	1.332E-01	0.264E-01	19.79	
CM-243	8.99E+08S	1.01	9.096E-02	9.145E-02	5.401E-02	59.05	
			---	---			
		Total Activity :	1.276E+01	1.276E+01			

Grand Total Activity : 1.276E+01 1.276E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701037 Acquisition date : 17-DEC-2007 11:03:12

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.76	77	367	0.97	92.98	89	8	5.37E-03	96.3	1.79E+00	
0	52.73	63	290	1.28	104.94	102	7	4.35E-03	93.6	2.81E+00	
0	57.02	39	280	1.46	113.53	111	6	2.68E-03	****	3.56E+00	
5	84.26	88	326	1.23	168.04	165	13	6.13E-03	70.8	6.91E+00	
0	89.69	76	405	0.98	178.91	177	6	5.28E-03	86.7	7.23E+00	
2	111.30	38	274	1.00	222.18	215	14	2.64E-03	****	7.75E+00	
2	113.02	42	336	1.10	225.62	215	14	2.94E-03	****	7.75E+00	
0	154.29	9	296	0.92	308.23	305	6	6.27E-04	****	7.22E+00	
0	185.88	341	401	1.09	371.46	367	10	2.37E-02	26.2	6.56E+00	
0	327.63	92	182	1.32	655.20	651	9	6.42E-03	56.6	4.46E+00	
0	554.20	13	85	1.17	1108.66	1102	9	8.88E-04	****	2.94E+00	
0	666.33	22	69	0.84	1333.08	1329	9	1.49E-03	****	2.52E+00	
0	679.86	25	24	1.33	1360.17	1357	6	1.72E-03	74.5	2.47E+00	
0	748.14	43	56	4.60	1496.80	1492	12	3.02E-03	74.3	2.27E+00	
0	840.60	32	64	1.76	1681.84	1676	9	2.26E-03	95.9	2.05E+00	
0	993.35	38	44	5.81	1987.51	1980	16	2.61E-03	85.4	1.76E+00	
5	1007.18	26	48	2.59	2015.18	1996	45	1.80E-03	****	1.74E+00	
5	1018.58	24	18	1.62	2038.00	1996	45	1.67E-03	60.1	1.72E+00	
0	1095.42	22	31	0.88	2191.76	2187	10	1.56E-03	****	1.61E+00	
0	1212.70	32	27	2.55	2426.44	2421	11	2.22E-03	72.6	1.48E+00	
0	1428.51	7	25	3.53	2858.23	2849	14	4.97E-04	****	1.29E+00	
3	1466.58	19	0	2.21	2934.40	2915	23	1.32E-03	55.1	1.26E+00	
0	1622.69	21	27	0.91	3246.72	3238	17	1.44E-03	****	1.17E+00	
0	1631.27	20	14	1.34	3263.90	3259	12	1.37E-03	90.1	1.17E+00	
0	1642.57	16	7	3.82	3286.50	3281	10	1.09E-03	82.4	1.17E+00	
0	1793.03	6	14	3.37	3587.52	3575	14	4.48E-04	****	1.11E+00	
0	1816.76	5	10	0.53	3634.98	3627	9	3.26E-04	****	1.10E+00	
0	1842.26	20	8	4.76	3685.99	3678	16	1.41E-03	76.4	1.09E+00	
0	1848.42	16	9	1.55	3698.31	3694	9	1.11E-03	84.1	1.09E+00	
0	1929.99	21	3	3.61	3861.49	3854	14	1.43E-03	58.6	1.07E+00	
0	1960.48	5	4	0.85	3922.49	3917	9	3.78E-04	****	1.06E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701037            *
* Acquisition date : 17-DEC-2007 11:03:12 Detector SN#    :                 *
* Detector ID      : GAM11                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.14     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701037           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4594E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-OCT-2007 15:05:44 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.888E+00	4.980E-01	1.400E-01	4.980E-01
CS-137	2.139E-01	3.295E-02	1.116E-02	3.295E-02
EU-155	1.018E-01	5.889E-02	3.114E-02	5.889E-02
TL-208	2.089E-01	3.213E-02	1.215E-02	3.213E-02
BI-212	4.706E-01	2.029E-01	8.914E-02	2.029E-01
PB-212	6.484E-01	5.896E-02	1.907E-02	5.896E-02
BI-214	7.304E-01	9.436E-02	2.324E-02	9.436E-02
PB-214	8.247E-01	8.721E-02	2.452E-02	8.721E-02
RA-223	2.287E-01	1.071E-01	5.961E-02	1.071E-01
AC-228	7.523E-01	1.386E-01	4.400E-02	1.386E-01
PA-234M	3.223E+00	3.087E+00	1.361E+00	3.087E+00
TH-234	7.317E-01	2.626E-01	1.558E-01	2.626E-01
U-235	4.262E-02	1.236E-01	7.015E-02	1.236E-01
NP-236	2.827E-02	3.137E-02	1.561E-02	3.137E-02
NP-237	3.574E-01	1.078E-01	6.949E-02	1.078E-01
NP-239	8.733E-02	1.028E-01	7.566E-02	1.028E-01
AM-243	1.332E-01	2.584E-02	1.499E-02	2.584E-02
CM-243	9.145E-02	5.293E-02	2.905E-02	5.293E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-3.719E-03	1.658E-02	1.368E-02	1.658E-02	NOT IDENT.
RH-101	1.090E-03	1.556E-02	1.277E-02	1.556E-02	NOT IDENT.
SB-125	-5.133E-04	3.800E-02	3.354E-02	3.800E-02	NOT IDENT.
PO-209	-1.073E+00	2.784E+00	2.331E+00	2.784E+00	NOT IDENT.
BI-211	-1.849E-01	3.935E-01	3.304E-01	3.935E-01	NOT IDENT.
PA-233	1.171E-02	2.607E-02	2.261E-02	2.607E-02	NOT IDENT.
AM-241	-1.943E-02	5.546E-02	3.730E-02	5.546E-02	NOT IDENT.
AM-246	1.838E-02	5.290E-02	4.665E-02	5.290E-02	NOT IDENT.
CF-249	1.106E-03	1.594E-02	1.426E-02	1.594E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
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ENERGY	MDA COUNTS
59.54	295.0949
63.29	337.3857
74.66	373.7452
74.81	373.8714
74.81	373.8714
77.11	375.8159
77.11	375.8159
86.48	359.6465
87.30	360.2530
87.30	360.2530
92.58	375.9292
98.44	196.7499
103.76	255.0907
105.31	238.3069
129.07	290.5090
143.76	323.7542
198.00	285.7576
209.25	255.1840
228.18	223.8969
238.63	217.2074
242.00	217.9404
269.46	180.2019
270.25	175.3716
277.36	194.2688
295.22	179.2955
300.09	176.6458
312.17	150.9841
338.32	162.5756
351.93	156.6602
387.59	138.9551
409.46	138.2813
427.87	123.1679
463.00	109.6918
510.77	83.3723
583.19	88.6939
609.31	89.8542
661.66	60.9820
727.33	64.2972
763.13	83.1817
768.36	90.8962
785.37	62.5010
794.95	51.5366
806.17	58.5159
831.80	64.5518
860.56	54.2235
896.60	55.8691
911.20	50.5446
934.06	47.1753
964.77	55.2997
968.97	55.3790
1001.03	43.4246
1078.86	42.5297
1120.29	38.0575
1155.19	53.6289
1173.23	48.8227
1238.11	48.3346
1280.96	40.8643
1332.51	49.9145
1377.67	25.0662
1401.50	18.0111
1407.98	29.2241
1460.80	39.4664
1509.23	12.6724
1588.20	37.6270
1620.50	21.1132
1729.60	17.4521
1764.49	12.6943

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701037

Total Uranium Activity	1.9720E-02	ug/g
Total Uranium Counting Unc.	5.7199E-02	ug/g
Total Uranium Tpu	5.7199E-08	ug/g
Total Uranium Mda	3.2459E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 15:04:19.82

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701038.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:03:36
Sample ID        : G198701038           Sample quantity  : 1.12100E+02 GRAM
Detector name    : GAM12                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.76  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.46*	14	386	1.41	126.15	122	8	9.71E-04	272.5	
2	2	72.06*	19	209	1.35	143.35	141	19	1.33E-03	122.6	1.85E+00
3	2	73.62*	34	363	1.24	146.47	141	19	2.34E-03	110.9	
4	2	74.92*	256	360	1.21	149.07	141	19	1.78E-02	14.7	
5	2	77.15	449	402	1.26	153.54	141	19	3.12E-02	9.4	
6	1	84.40*	13	466	1.25	168.05	163	20	9.04E-04	290.0	3.48E+00
7	1	87.26	125	457	1.24	173.77	163	20	8.67E-03	29.3	
8	0	92.78*	125	472	1.48	184.82	182	8	8.66E-03	36.5	
9	0	128.78	72	356	1.07	256.84	253	8	5.02E-03	46.8	
10	0	144.12*	33	280	0.99	287.53	284	7	2.27E-03	94.8	
11	0	185.81*	231	401	1.09	370.94	365	11	1.60E-02	19.7	
12	0	209.03	91	298	1.09	417.40	414	9	6.34E-03	35.5	
13	4	238.60*	912	187	1.24	476.56	469	19	6.34E-02	4.4	8.10E-01
14	4	241.69*	236	284	1.76	482.75	469	19	1.64E-02	18.5	
15	0	270.59	82	254	1.16	540.57	536	10	5.66E-03	38.6	
16	0	295.03*	313	269	1.22	589.47	583	13	2.17E-02	12.7	
17	0	300.22	86	187	1.65	599.84	595	10	5.98E-03	31.6	
18	2	325.22	44	148	1.24	649.85	644	17	3.05E-03	47.3	1.47E+00
19	2	328.19	43	214	1.69	655.79	644	17	3.02E-03	65.0	
20	0	338.51	200	198	1.45	676.43	671	11	1.39E-02	15.4	
21	0	351.80*	569	243	1.45	703.03	697	12	3.95E-02	7.2	
22	0	398.95	65	140	4.31	797.35	793	12	4.48E-03	38.5	
23	0	436.67	12	139	0.62	872.81	868	11	8.56E-04	189.3	
24	0	463.01	47	98	1.54	925.51	921	8	3.29E-03	39.0	
25	0	510.93*	117	183	2.32	1021.35	1013	18	8.14E-03	36.0	
26	0	537.82	35	79	3.10	1075.15	1070	10	2.43E-03	50.7	
27	0	548.99	34	75	1.92	1097.49	1093	10	2.36E-03	50.6	
28	0	567.29	9	56	1.06	1134.09	1129	8	6.14E-04	152.1	
29	0	583.27*	278	83	1.23	1166.06	1161	11	1.93E-02	9.7	
30	0	609.20*	413	98	1.66	1217.92	1211	14	2.87E-02	7.5	
31	0	648.85	60	114	6.36	1297.22	1286	20	4.18E-03	45.5	
32	2	661.54	367	55	1.63	1322.61	1314	22	2.55E-02	6.5	1.04E+00
33	2	665.77	36	47	1.97	1331.06	1314	22	2.47E-03	43.0	
34	0	726.60*	38	68	2.08	1452.73	1448	12	2.67E-03	50.1	
35	0	750.96	13	62	3.36	1501.44	1491	12	8.94E-04	126.3	
36	0	860.55	69	41	3.01	1720.62	1715	12	4.82E-03	22.1	
37	0	910.96*	203	66	1.79	1821.42	1814	17	1.41E-02	12.0	
38	1	964.74	32	53	1.96	1928.98	1923	20	2.21E-03	51.0	2.24E+00

Sample ID : G198701038 Acquisition date : 17-DEC-2007 11:03:36

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	1	968.57*	73	61	1.83	1936.64	1923	20	5.06E-03	25.4	
40	0	1088.77	26	60	8.79	2177.00	2164	20	1.81E-03	75.6	
41	0	1120.30*	83	45	1.95	2240.04	2233	13	5.73E-03	21.3	
42	0	1183.19	30	16	1.07	2365.79	2359	13	2.08E-03	33.2	
43	0	1224.63	12	10	0.59	2448.65	2445	6	8.02E-04	53.2	
44	0	1237.92*	29	36	1.79	2475.23	2469	12	2.03E-03	49.1	
45	4	1270.96	23	13	2.81	2541.27	2535	20	1.60E-03	42.3	1.62E+00
46	4	1275.02	17	18	2.56	2549.39	2535	20	1.18E-03	50.8	
47	0	1377.58*	7	16	1.05	2754.43	2749	10	5.20E-04	121.4	
48	0	1391.20	13	9	2.44	2781.66	2776	9	9.12E-04	49.5	
49	0	1460.54*	386	35	1.99	2920.29	2912	19	2.68E-02	6.6	
50	3	1508.42	16	1	2.02	3016.00	3013	12	1.14E-03	25.9	1.75E+00
51	3	1510.74	16	3	2.20	3020.64	3013	12	1.11E-03	36.4	
52	0	1566.00	11	22	5.21	3131.11	3121	17	7.57E-04	101.9	
53	0	1587.53	21	27	0.77	3174.14	3167	15	1.48E-03	56.8	
54	0	1620.48	10	16	1.63	3240.01	3231	13	6.86E-04	89.8	
55	0	1660.98	15	11	0.58	3320.95	3312	15	1.03E-03	55.4	
56	0	1677.72*	5	6	2.19	3354.41	3348	11	3.17E-04	149.9	
57	0	1704.01	13	7	3.91	3406.96	3400	14	9.03E-04	51.3	
58	0	1713.90	16	8	2.31	3426.74	3419	15	1.08E-03	46.1	
59	0	1763.84*	75	12	2.34	3526.54	3519	13	5.24E-03	17.9	
60	0	1774.02	10	2	1.64	3546.91	3542	9	6.77E-04	42.4	
61	0	1847.80	10	11	0.98	3694.36	3689	11	6.89E-04	72.1	
62	0	1899.16	6	12	1.29	3797.00	3789	12	4.17E-04	122.5	
63	0	1946.64	6	3	0.65	3891.90	3887	8	3.86E-04	74.2	
64	0	1957.26	5	8	1.26	3913.11	3905	10	3.47E-04	123.3	
65	0	1989.46	10	3	1.49	3977.46	3971	12	7.02E-04	46.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701038       *
* Acquisition date : 17-DEC-2007 11:03:36 Detector SN#    :                 *
* Detector ID      : GAM12                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.76     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701038           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1210E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  1-FEB-2007 15:01:06 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.348E+00	7.650E-01	3.681E-01	0.000E+00
CS-137	3.229E-01	4.959E-02	3.644E-02	0.000E+00
TL-208	2.206E-01	4.535E-02	3.826E-02	0.000E+00
BI-212	2.628E-01	2.592E-01	2.607E-01	0.000E+00
PB-212	7.127E-01	7.536E-02	5.660E-02	0.000E+00
BI-214	6.224E-01	1.041E-01	6.522E-02	0.000E+00
PB-214	6.791E-01	1.029E-01	7.905E-02	0.000E+00
RA-223	2.198E-01	1.670E-01	1.859E-01	0.000E+00
AC-228	7.750E-01	1.983E-01	1.153E-01	0.000E+00
TH-234	6.418E-01	4.616E-01	4.051E-01	0.000E+00
U-235	7.746E-02	1.441E-01	2.058E-01	0.000E+00
NP-237	2.957E-01	1.716E-01	2.462E-01	0.000E+00
AM-243	1.348E-01	3.996E-02	4.944E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	1.408E-03	2.193E-02	3.748E-02	0.000E+00	NOT IDENT.
RH-101	2.953E-03	2.210E-02	3.515E-02	0.000E+00	NOT IDENT.
SB-125	7.134E-02	6.202E-02	1.089E-01	0.000E+00	NOT IDENT.
EU-155	2.500E-02	6.132E-02	1.095E-01	0.000E+00	NOT IDENT.
PO-209	2.071E+00	4.449E+00	7.671E+00	0.000E+00	NOT IDENT.
BI-211	-7.803E-01	5.976E-01	8.582E-01	0.000E+00	NOT IDENT.
PA-233	1.282E-02	3.987E-02	6.786E-02	0.000E+00	NOT IDENT.
PA-234M	2.937E+00	3.194E+00	5.165E+00	0.000E+00	NOT IDENT.
NP-236	-4.940E-02	3.926E-02	5.786E-02	0.000E+00	NOT IDENT.
NP-239	1.993E-02	1.396E-01	2.390E-01	0.000E+00	NOT IDENT.
AM-241	-7.436E-03	9.778E-02	1.453E-01	0.000E+00	NOT IDENT.
CM-243	7.114E-03	5.814E-02	9.583E-02	0.000E+00	NOT IDENT.
AM-246	-2.860E-02	7.854E-02	1.089E-01	0.000E+00	NOT IDENT.
CF-249	3.401E-03	2.405E-02	4.011E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 15:04:21.02

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701038.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:03:36
Sample ID        : G198701038           Sample quantity  : 1.12100E+02 GRAM
Detector name    : GAM12                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.76  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	386	10.66*	1.134E+00	5.348E+00	5.348E+00	14.59
CS-137	661.66	367	85.10*	2.248E+00	3.212E-01	3.229E-01	15.67
TL-208	277.36	------	6.31	4.454E+00	------	Line Not Found	------
	510.77	117	22.60	2.786E+00	3.115E-01	3.115E-01	72.29
	583.19	278	84.50*	2.499E+00	2.206E-01	2.206E-01	20.98
	763.13	------	1.81	1.987E+00	------	Line Not Found	------
	860.56	69	12.42	1.787E+00	5.238E-01	5.238E-01	45.42
BI-212	727.33	38	11.80*	2.074E+00	2.628E-01	2.628E-01	100.63
	785.37	------	1.10	1.938E+00	------	Line Not Found	------
	1620.50	10	1.49	1.052E+00	1.056E+00	1.056E+00	179.73
PB-212	74.81	256	10.40	4.667E+00	8.842E-01	8.842E-01	30.24
	77.11	449	17.50	4.891E+00	8.787E-01	8.787E-01	20.11
	87.30	125	7.81	5.701E+00	4.695E-01	4.695E-01	59.22
	238.63	912	43.30*	4.950E+00	7.127E-01	7.127E-01	10.79
	300.09	86	3.28	4.204E+00	1.046E+00	1.046E+00	63.51
BI-214	609.31	413	46.10*	2.410E+00	6.224E-01	6.224E-01	17.06
	768.36	------	4.94	1.975E+00	------	Line Not Found	------
	806.17	------	1.22	1.894E+00	------	Line Not Found	------
	934.06	------	3.03	1.662E+00	------	Line Not Found	------
	1120.29	83	15.10	1.414E+00	6.469E-01	6.470E-01	43.11
	1155.19	------	1.63	1.377E+00	------	Line Not Found	------
	1238.11	29	5.79	1.297E+00	6.531E-01	6.532E-01	98.48
	1280.96	------	1.43	1.260E+00	------	Line Not Found	------
	1377.67	7	4.00	1.187E+00	2.643E-01	2.643E-01	242.94
	1401.50	------	1.27	1.171E+00	------	Line Not Found	------
	1407.98	------	2.15	1.166E+00	------	Line Not Found	------
	1509.23	16	2.11	1.107E+00	1.181E+00	1.181E+00	52.23
	1729.60	------	2.92	1.009E+00	------	Line Not Found	------
	1764.49	75	15.40	9.975E-01	8.227E-01	8.227E-01	36.18
PB-214	74.81	256	6.44	4.667E+00	1.428E+00	1.428E+00	30.24
	77.11	449	10.80	4.891E+00	1.424E+00	1.424E+00	20.11
	87.30	125	4.84	5.701E+00	7.576E-01	7.577E-01	59.22

Sample ID : G198701038 Acquisition date : 17-DEC-2007 11:03:36

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	236	7.43	4.906E+00	1.083E+00	1.083E+00	37.49
	295.22	313	19.30	4.258E+00	6.379E-01	6.380E-01	26.05
	351.93	569	37.60*	3.733E+00	6.790E-01	6.791E-01	15.47
RA-223	269.46	82	13.70*	4.533E+00	2.198E-01	2.198E-01	77.52
AC-228	129.07	72	2.42	6.596E+00	7.580E-01	7.580E-01	93.85
	209.25	91	3.89	5.396E+00	7.282E-01	7.282E-01	71.31
	270.25	82	3.46	4.533E+00	8.703E-01	8.703E-01	77.52
	338.32	200	11.27	3.844E+00	7.743E-01	7.743E-01	31.34
	409.46	------	1.92	3.322E+00	------ Line Not Found		------
	463.00	47	4.40	3.015E+00	5.976E-01	5.976E-01	78.26
	794.95	------	4.25	1.917E+00	------ Line Not Found		------
	911.20	203	25.80*	1.699E+00	7.750E-01	7.750E-01	26.11
	964.77	32	4.99	1.614E+00	6.628E-01	6.628E-01	102.55
	968.97	73	15.80	1.609E+00	4.800E-01	4.800E-01	51.77
	1588.20	21	3.22	1.067E+00	1.039E+00	1.039E+00	113.72
TH-234	63.29	14	4.80	3.279E+00	1.488E-01	1.488E-01	545.02
	92.58	125	5.41*	6.014E+00	6.418E-01	6.418E-01	73.40
U-235	143.76	33	10.96*	6.452E+00	7.746E-02	7.746E-02	189.78
NP-237	86.48	125	12.40*	5.701E+00	2.957E-01	2.957E-01	59.22
AM-243	74.66	256	68.20*	4.667E+00	1.348E-01	1.348E-01	30.24

Flag: "*" = Keyline

Sample ID : G198701038 Acquisition date : 17-DEC-2007 11:03:36

Total number of lines in spectrum 65
Number of unidentified lines 32
Number of lines tentatively identified by NID 33 50.77%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.348E+00	5.348E+00	0.781E+00	14.59	
CS-137	9.47E+08S	1.01	3.212E-01	3.229E-01	0.506E-01	15.67	
TL-208	4.43E+17S	1.00	2.206E-01	2.206E-01	0.463E-01	20.98	
BI-212	4.43E+17S	1.00	2.628E-01	2.628E-01	2.645E-01	100.63	
PB-212	4.43E+17S	1.00	7.127E-01	7.127E-01	0.769E-01	10.79	
BI-214	5.05E+10S	1.00	6.224E-01	6.224E-01	1.062E-01	17.06	
PB-214	5.05E+10S	1.00	6.790E-01	6.791E-01	1.050E-01	15.47	
RA-223	1.04E+12S	1.00	2.198E-01	2.198E-01	1.704E-01	77.52	
AC-228	4.43E+17S	1.00	7.750E-01	7.750E-01	2.023E-01	26.11	
TH-234	1.41E+17S	1.00	6.418E-01	6.418E-01	4.711E-01	73.40	
U-235	2.22E+16S	1.00	7.746E-02	7.746E-02	14.70E-02	189.78	
NP-237	6.75E+13S	1.00	2.957E-01	2.957E-01	1.751E-01	59.22	
AM-243	2.33E+11S	1.00	1.348E-01	1.348E-01	0.408E-01	30.24	
			---	---			
	Total Activity :		1.031E+01	1.031E+01			

Grand Total Activity : 1.031E+01 1.031E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701038 Acquisition date : 17-DEC-2007 11:03:36

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	72.06	19	209	1.35	143.35	141	19	1.33E-03	****	4.36E+00	
2	73.62	34	363	1.24	146.47	141	19	2.34E-03	****	4.53E+00	
1	84.40	13	466	1.25	168.05	163	20	9.04E-04	****	5.50E+00	
0	185.81	231	401	1.09	370.94	365	11	1.60E-02	39.4	5.78E+00	
2	325.22	44	148	1.24	649.85	644	17	3.05E-03	94.6	3.96E+00	
2	328.19	43	214	1.69	655.79	644	17	3.02E-03	****	3.93E+00	
0	398.95	65	140	4.31	797.35	793	12	4.48E-03	77.1	3.39E+00	
0	436.67	12	139	0.62	872.81	868	11	8.56E-04	****	3.16E+00	
0	537.82	35	79	3.10	1075.15	1070	10	2.43E-03	****	2.67E+00	
0	548.99	34	75	1.92	1097.49	1093	10	2.36E-03	****	2.63E+00	
0	567.29	9	56	1.06	1134.09	1129	8	6.14E-04	****	2.56E+00	
0	648.85	60	114	6.36	1297.22	1286	20	4.18E-03	91.0	2.29E+00	
2	665.77	36	47	1.97	1331.06	1314	22	2.47E-03	86.1	2.24E+00	
0	750.96	13	62	3.36	1501.44	1491	12	8.94E-04	****	2.02E+00	
0	1088.77	26	60	8.79	2177.00	2164	20	1.81E-03	****	1.45E+00	
0	1183.19	30	16	1.07	2365.79	2359	13	2.08E-03	66.3	1.35E+00	
0	1224.63	12	10	0.59	2448.65	2445	6	8.02E-04	****	1.31E+00	
4	1270.96	23	13	2.81	2541.27	2535	20	1.60E-03	84.6	1.27E+00	
4	1275.02	17	18	2.56	2549.39	2535	20	1.18E-03	****	1.26E+00	
0	1391.20	13	9	2.44	2781.66	2776	9	9.12E-04	99.0	1.18E+00	
3	1510.74	16	3	2.20	3020.64	3013	12	1.11E-03	72.8	1.11E+00	
0	1566.00	11	22	5.21	3131.11	3121	17	7.57E-04	****	1.08E+00	
0	1660.98	15	11	0.58	3320.95	3312	15	1.03E-03	****	1.03E+00	
0	1677.72	5	6	2.19	3354.41	3348	11	3.17E-04	****	1.03E+00	
0	1704.01	13	7	3.91	3406.96	3400	14	9.03E-04	****	1.02E+00	
0	1713.90	16	8	2.31	3426.74	3419	15	1.08E-03	92.3	1.01E+00	
0	1774.02	10	2	1.64	3546.91	3542	9	6.77E-04	84.7	9.94E-01	
0	1847.80	10	11	0.98	3694.36	3689	11	6.89E-04	****	9.73E-01	
0	1899.16	6	12	1.29	3797.00	3789	12	4.17E-04	****	9.60E-01	
0	1946.64	6	3	0.65	3891.90	3887	8	3.86E-04	****	9.49E-01	
0	1957.26	5	8	1.26	3913.11	3905	10	3.47E-04	****	9.47E-01	
0	1989.46	10	3	1.49	3977.46	3971	12	7.02E-04	92.7	9.41E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701038            *
* Acquisition date : 17-DEC-2007 11:03:36 Detector SN#    :                 *
* Detector ID      : GAM12                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.76     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701038           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1210E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  1-FEB-2007 15:01:06 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.348E+00	7.650E-01	1.841E-01	7.650E-01
CS-137	3.229E-01	4.959E-02	1.823E-02	4.959E-02
TL-208	2.206E-01	4.535E-02	1.914E-02	4.535E-02
BI-212	2.628E-01	2.592E-01	1.304E-01	2.592E-01
PB-212	7.127E-01	7.536E-02	2.832E-02	7.536E-02
BI-214	6.224E-01	1.041E-01	3.263E-02	1.041E-01
PB-214	6.791E-01	1.029E-01	3.955E-02	1.029E-01
RA-223	2.198E-01	1.670E-01	9.298E-02	1.670E-01
AC-228	7.750E-01	1.983E-01	5.769E-02	1.983E-01
TH-234	6.418E-01	4.616E-01	2.027E-01	4.616E-01
U-235	7.746E-02	1.441E-01	1.030E-01	1.441E-01
NP-237	2.957E-01	1.716E-01	1.232E-01	1.716E-01
AM-243	1.348E-01	3.996E-02	2.473E-02	3.996E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.408E-03	2.193E-02	1.875E-02	2.193E-02	NOT IDENT.
RH-101	2.953E-03	2.210E-02	1.759E-02	2.210E-02	NOT IDENT.
SB-125	7.134E-02	6.202E-02	5.446E-02	6.202E-02	NOT IDENT.
EU-155	2.500E-02	6.132E-02	5.477E-02	6.132E-02	NOT IDENT.
PO-209	2.071E+00	4.449E+00	3.838E+00	4.449E+00	NOT IDENT.
BI-211	-7.803E-01	5.976E-01	4.293E-01	5.976E-01	NOT IDENT.
PA-233	1.282E-02	3.987E-02	3.395E-02	3.987E-02	NOT IDENT.
PA-234M	2.937E+00	3.194E+00	2.584E+00	3.194E+00	NOT IDENT.
NP-236	-4.940E-02	3.926E-02	2.895E-02	3.926E-02	NOT IDENT.
NP-239	1.993E-02	1.396E-01	1.196E-01	1.396E-01	NOT IDENT.
AM-241	-7.436E-03	9.778E-02	7.267E-02	9.778E-02	NOT IDENT.
CM-243	7.114E-03	5.814E-02	4.794E-02	5.814E-02	NOT IDENT.
AM-246	-2.860E-02	7.854E-02	5.447E-02	7.854E-02	NOT IDENT.
CF-249	3.401E-03	2.405E-02	2.007E-02	2.405E-02	NOT IDENT.

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                 2040 SAVAGE ROAD                          *
*                              CHARLESTON ,SC 29417                         *
*                        GAMMA SPECTROSCOPY BACKGROUND REPORT               *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	326.0616
63.29	339.7255
74.66	388.5589
74.81	388.6489
74.81	388.6489
77.11	390.0079
77.11	390.0079
86.48	473.3887
87.30	473.9297
87.30	473.9297
92.58	275.7336
98.44	348.4951
103.76	308.8951
105.31	316.2069
129.07	328.4576
143.76	340.1505
198.00	276.6841
209.25	255.9434
228.18	271.5106
238.63	237.9236
242.00	238.5040
269.46	217.1611
270.25	214.8467
277.36	212.8046
295.22	179.6238
300.09	168.6013
312.17	173.8088
338.32	165.9357
351.93	200.2348
387.59	132.4583
409.46	127.3582
427.87	119.6559
463.00	121.6582
510.77	103.0907
583.19	107.1265
609.31	86.1812
661.66	79.0600
727.33	66.8822
763.13	98.9714
768.36	70.8118
785.37	63.0565
794.95	54.0636
806.17	80.8651
831.80	73.2430
860.56	48.8979
896.60	53.6123
911.20	42.2217
934.06	70.1073
964.77	56.7693
968.97	55.4029
1001.03	28.1163
1078.86	39.3886
1120.29	49.3349
1155.19	49.6099
1173.23	39.4775
1238.11	50.6885
1280.96	42.9120
1332.51	32.1205
1377.67	28.4914
1401.50	34.5528
1407.98	29.6545
1460.80	32.9611
1509.23	33.2699
1588.20	43.8459
1620.50	19.4050
1729.60	23.0742
1764.49	10.8516

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701038

Total Uranium Activity	3.5842E-02	ug/g
Total Uranium Counting Unc.	6.6659E-02	ug/g
Total Uranium Tpu	6.6659E-08	ug/g
Total Uranium Mda	4.7642E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 04:50:48.09

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701039.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 16-DEC-2007 16:47:11
Sample ID        : G198701039           Sample quantity  : 7.77900E+01 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 12:00:00.00        Elapsed real time: 0 12:03:06.50  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.98*	60	766	1.07	93.93	90	8	1.38E-03	106.7	
2	0	63.23*	106	1036	1.17	126.40	123	9	2.46E-03	70.7	
3	0	66.29*	25	792	1.44	132.51	131	7	5.78E-04	220.1	
4	2	72.78*	72	518	1.36	145.47	143	18	1.66E-03	53.6	1.38E+00
5	2	74.95*	640	867	1.12	149.81	143	18	1.48E-02	9.9	
6	2	77.21*	1032	802	1.17	154.33	143	18	2.39E-02	6.8	
7	3	84.45*	254	727	1.52	168.79	165	29	5.88E-03	23.3	3.39E+00
8	3	87.40*	508	900	1.43	174.68	165	29	1.18E-02	12.9	
9	3	89.98*	335	577	1.05	179.82	165	29	7.75E-03	14.1	
10	3	92.77*	520	638	1.25	185.40	165	29	1.20E-02	13.4	
11	0	98.71	118	842	1.61	197.26	194	9	2.74E-03	45.1	
12	0	105.66	107	601	1.20	211.15	208	7	2.48E-03	39.2	
13	0	115.26	48	559	1.42	230.33	229	6	1.11E-03	79.3	
14	0	129.07	129	648	1.04	257.92	255	7	2.99E-03	33.9	
15	0	139.97*	14	605	1.56	279.70	277	7	3.21E-04	369.7	
16	0	143.59*	36	620	0.86	286.92	284	7	8.32E-04	150.3	
17	0	185.81*	382	669	1.34	371.27	368	9	8.83E-03	17.0	
18	0	209.22	179	703	0.81	418.04	413	9	4.15E-03	27.7	
19	3	238.68*	2155	462	1.11	476.89	469	20	4.99E-02	3.4	1.38E+00
20	3	241.50	404	623	1.74	482.53	469	20	9.36E-03	16.2	
21	0	270.02	232	668	1.48	539.52	534	12	5.38E-03	23.2	
22	0	295.30	430	581	0.95	590.03	584	12	9.95E-03	12.2	
23	0	300.05	119	453	1.32	599.52	596	9	2.75E-03	33.5	
24	0	328.06	84	391	1.43	655.48	652	8	1.95E-03	41.9	
25	0	332.72	49	372	2.34	664.80	661	8	1.14E-03	69.6	
26	0	338.35	388	528	1.24	676.05	670	11	8.99E-03	12.5	
27	0	351.93*	663	387	1.41	703.19	698	10	1.53E-02	8.1	
28	0	463.26	124	262	1.40	925.70	923	9	2.87E-03	25.1	
29	0	511.15*	223	502	2.36	1021.43	1012	19	5.16E-03	34.5	
30	0	538.11	19	264	0.64	1075.32	1069	12	4.40E-04	172.6	
31	0	583.41*	583	260	1.37	1165.87	1159	13	1.35E-02	8.3	
32	0	609.73*	394	276	1.31	1218.49	1212	12	9.11E-03	11.9	
33	0	661.96	357	200	1.33	1322.93	1318	9	8.26E-03	8.9	
34	0	694.95*	42	252	1.40	1388.88	1382	14	9.74E-04	94.3	
35	0	727.44	180	148	1.73	1453.84	1448	11	4.16E-03	15.1	
36	0	771.67	82	202	1.68	1542.30	1535	14	1.89E-03	38.8	
37	0	785.59	52	122	1.52	1570.13	1566	10	1.20E-03	42.3	
38	0	795.44	77	132	1.41	1589.84	1584	11	1.79E-03	31.0	

Sample ID : G198701039 Acquisition date : 16-DEC-2007 16:47:11

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	861.65	153	137	1.89	1722.25	1715	17	3.53E-03	19.5	
40	0	869.63	42	115	4.22	1738.21	1733	12	9.72E-04	53.2	
41	0	898.78	19	130	1.16	1796.52	1792	11	4.51E-04	115.3	
42	0	911.72*	403	159	1.59	1822.39	1815	15	9.32E-03	9.5	
43	3	964.95*	11	86	2.28	1928.87	1920	25	2.56E-04	526.8	1.67E+00
44	3	969.58	241	81	1.64	1938.15	1920	25	5.57E-03	9.4	
45	0	1002.49*	11	129	1.76	2003.97	1999	14	2.63E-04	254.7	
46	0	1090.10	20	54	1.07	2179.25	2176	8	4.70E-04	65.7	
47	0	1121.18*	78	63	1.20	2241.44	2237	11	1.81E-03	34.0	
48	0	1151.66	15	40	1.27	2302.43	2299	6	3.40E-04	73.1	
49	0	1239.16	44	79	0.70	2477.53	2472	12	1.03E-03	42.6	
50	0	1293.77	16	43	1.11	2586.84	2581	10	3.78E-04	78.7	
51	0	1301.57	36	62	1.83	2602.45	2594	14	8.29E-04	49.8	
52	0	1333.86	23	42	1.86	2667.09	2663	8	5.42E-04	52.9	
53	0	1379.28	25	60	1.75	2758.01	2752	11	5.86E-04	62.7	
54	0	1386.54	17	27	1.20	2772.53	2769	8	3.86E-04	58.7	
55	0	1461.52*	147	67	1.29	2922.63	2916	14	3.40E-03	19.1	
56	1	1496.16	28	34	1.91	2992.00	2984	24	6.60E-04	44.0	1.45E+00
57	1	1499.16	23	26	1.91	2998.00	2984	24	5.41E-04	52.1	
58	0	1562.29	21	26	0.80	3124.40	3119	10	4.91E-04	50.7	
59	0	1589.99	97	26	6.79	3179.88	3172	17	2.23E-03	15.7	
60	0	1623.63	13	67	0.60	3247.25	3240	12	3.08E-04	125.2	
61	0	1631.83	24	36	1.08	3263.67	3257	11	5.49E-04	53.1	
62	0	1736.85	38	28	2.71	3474.01	3466	18	8.81E-04	36.0	
63	0	1756.25	11	24	0.68	3512.86	3508	8	2.53E-04	85.3	
64	0	1765.52	130	29	1.31	3531.43	3525	13	3.00E-03	12.3	
65	0	1802.96	12	33	1.36	3606.44	3601	12	2.67E-04	104.1	
66	0	1862.50	28	26	3.30	3725.71	3718	17	6.50E-04	45.4	
67	0	1916.14	45	9	2.41	3833.18	3823	19	1.03E-03	22.3	
68	0	1923.24	23	7	4.78	3847.40	3842	12	5.44E-04	29.5	
69	0	1983.28	32	11	4.46	3967.71	3961	15	7.46E-04	28.6	
70	0	2007.56	14	32	1.86	4016.36	4006	16	3.18E-04	96.0	
71	0	2011.45	15	13	0.82	4024.16	4021	7	3.58E-04	45.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701039       *
* Acquisition date : 16-DEC-2007 16:47:11 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 12:03:06.50     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701039           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 7.7790E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	8.612E-01	3.300E-01	1.922E-01	0.000E+00
CS-137	1.313E-01	2.452E-02	2.355E-02	0.000E+00
EU-155	5.419E-02	4.187E-02	5.836E-02	0.000E+00
TL-208	1.932E-01	3.372E-02	2.081E-02	0.000E+00
BI-212	5.151E-01	1.571E-01	1.578E-01	0.000E+00
PB-212	7.161E-01	6.295E-02	3.383E-02	0.000E+00
BI-214	2.480E-01	6.013E-02	4.411E-02	0.000E+00
PB-214	3.331E-01	5.586E-02	4.321E-02	0.000E+00
RA-223	2.653E-01	1.216E-01	1.122E-01	0.000E+00
AC-228	6.468E-01	1.343E-01	7.936E-02	0.000E+00
PA-234M	6.122E-01	3.056E+00	2.537E+00	0.000E+00
TH-234	1.038E+00	2.937E-01	2.478E-01	0.000E+00
U-235	3.564E-02	1.050E-01	1.148E-01	0.000E+00
NP-236	3.280E-02	2.913E-02	3.032E-02	0.000E+00
NP-237	4.571E-01	1.268E-01	1.120E-01	0.000E+00
AM-243	1.210E-01	2.686E-02	2.499E-02	0.000E+00
CM-243	4.871E-02	3.763E-02	5.383E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-2.257E-03		1.380E-02	2.203E-02	0.000E+00	FAIL ABUN
RH-101	-1.289E-02		1.719E-02	2.076E-02	0.000E+00	NOT IDENT.
SB-125	-6.927E-03		3.622E-02	5.755E-02	0.000E+00	NOT IDENT.
PO-209	4.124E-01		3.669E+00	4.528E+00	0.000E+00	NOT IDENT.
BI-211	-2.957E-01		3.640E-01	5.677E-01	0.000E+00	NOT IDENT.
PA-233	-6.746E-03		2.433E-02	3.904E-02	0.000E+00	NOT IDENT.
NP-239	2.982E-02		8.308E-02	1.374E-01	0.000E+00	NOT IDENT.
AM-241	-3.604E-03		4.608E-02	6.410E-02	0.000E+00	NOT IDENT.
AM-246	1.869E-02		4.786E-02	7.994E-02	0.000E+00	NOT IDENT.
CF-249	3.278E-03		1.578E-02	2.560E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 04:50:49.02

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701039.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 16-DEC-2007 16:47:11
Sample ID        : G198701039           Sample quantity  : 7.77900E+01 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 12:00:00.00        Elapsed real time: 0 12:03:06.50  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	147	10.66*	1.286E+00	8.612E-01	8.612E-01	39.10
CS-137	661.66	357	85.10*	2.581E+00	1.307E-01	1.313E-01	19.05
EU-155	105.31	107	21.20*	7.741E+00	5.256E-02	5.419E-02	78.83
TL-208	277.36	------	6.31	5.045E+00	------	Line Not Found	------
	510.77	223	22.60	3.199E+00	2.479E-01	2.479E-01	69.25
	583.19	583	84.50*	2.872E+00	1.932E-01	1.932E-01	17.81
	763.13	------	1.81	2.279E+00	------	Line Not Found	------
	860.56	153	12.42	2.043E+00	4.835E-01	4.835E-01	40.06
BI-212	727.33	180	11.80*	2.378E+00	5.151E-01	5.151E-01	31.13
	785.37	52	1.10	2.221E+00	1.706E+00	1.706E+00	84.98
	1620.50	------	1.49	1.195E+00	------	Line Not Found	------
PB-212	74.81	640	10.40	6.241E+00	7.933E-01	7.933E-01	22.66
	77.11	1032	17.50	6.463E+00	7.336E-01	7.336E-01	17.54
	87.30	508	7.81	7.205E+00	7.257E-01	7.257E-01	28.32
	238.63	2155	43.30*	5.589E+00	7.161E-01	7.161E-01	8.97
	300.09	119	3.28	4.774E+00	6.105E-01	6.105E-01	67.26
BI-214	609.31	394	46.10*	2.768E+00	2.480E-01	2.480E-01	24.74
	768.36	------	4.94	2.266E+00	------	Line Not Found	------
	806.17	------	1.22	2.170E+00	------	Line Not Found	------
	934.06	------	3.03	1.899E+00	------	Line Not Found	------
	1120.29	78	15.10	1.608E+00	2.591E-01	2.591E-01	68.26
	1155.19	------	1.63	1.566E+00	------	Line Not Found	------
	1238.11	44	5.79	1.472E+00	4.184E-01	4.185E-01	85.49
	1280.96	------	1.43	1.431E+00	------	Line Not Found	------
	1377.67	25	4.00	1.346E+00	3.781E-01	3.781E-01	125.61
	1401.50	------	1.27	1.329E+00	------	Line Not Found	------
	1407.98	------	2.15	1.324E+00	------	Line Not Found	------
	1509.23	------	2.11	1.256E+00	------	Line Not Found	------
	1729.60	------	2.92	1.149E+00	------	Line Not Found	------
	1764.49	130	15.40	1.136E+00	5.960E-01	5.961E-01	25.47
PB-214	74.81	640	6.44	6.241E+00	1.281E+00	1.281E+00	22.66
	77.11	1032	10.80	6.463E+00	1.189E+00	1.189E+00	17.54

Sample ID : G198701039 Acquisition date : 16-DEC-2007 16:47:11

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	508	4.84	7.205E+00	1.171E+00	1.171E+00	28.32
	242.00	404	7.43	5.546E+00	7.894E-01	7.895E-01	33.00
	295.22	430	19.30	4.828E+00	3.711E-01	3.711E-01	25.18
	351.93	663	37.60*	4.255E+00	3.331E-01	3.331E-01	17.11
RA-223	269.46	232	13.70*	5.140E+00	2.653E-01	2.653E-01	46.76
AC-228	129.07	129	2.42	7.644E+00	5.611E-01	5.611E-01	68.01
	209.25	179	3.89	6.087E+00	6.087E-01	6.087E-01	55.64
	270.25	232	3.46	5.140E+00	1.050E+00	1.050E+00	46.76
	338.32	388	11.27	4.379E+00	6.330E-01	6.330E-01	25.70
	409.46	------	1.92	3.801E+00	------	Line Not Found	------
	463.00	124	4.40	3.458E+00	6.561E-01	6.561E-01	50.57
	794.95	77	4.25	2.196E+00	6.655E-01	6.655E-01	62.48
	911.20	403	25.80*	1.941E+00	6.468E-01	6.468E-01	21.19
	964.77	11	4.99	1.843E+00	9.687E-02	9.687E-02	1053.59
	968.97	241	15.80	1.835E+00	6.678E-01	6.678E-01	20.66
	1588.20	97	3.22	1.210E+00	1.991E+00	1.991E+00	32.41
PA-234M	1001.03	11	0.84*	1.780E+00	6.122E-01	6.122E-01	509.40
TH-234	63.29	106	4.80	4.719E+00	3.774E-01	3.774E-01	141.77
	92.58	520	5.41*	7.450E+00	1.038E+00	1.038E+00	28.87
U-235	143.76	36	10.96*	7.401E+00	3.564E-02	3.564E-02	300.66
NP-236	98.44	118	38.00*	7.629E+00	3.280E-02	3.280E-02	90.63
NP-237	86.48	508	12.40*	7.205E+00	4.571E-01	4.571E-01	28.32
AM-243	74.66	640	68.20*	6.241E+00	1.210E-01	1.210E-01	22.66
CM-243	103.76	107	23.00*	7.741E+00	4.845E-02	4.871E-02	78.83

Flag: "*" = Keyline

Sample ID : G198701039 Acquisition date : 16-DEC-2007 16:47:11

Total number of lines in spectrum 71
Number of unidentified lines 34
Number of lines tentatively identified by NID 37 52.11%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	8.612E-01	8.612E-01	3.368E-01	39.10	
CS-137	9.47E+08S	1.01	1.307E-01	1.313E-01	0.250E-01	19.05	
EU-155	1.57E+08S	1.03	5.256E-02	5.419E-02	4.272E-02	78.83	
TL-208	4.43E+17S	1.00	1.932E-01	1.932E-01	0.344E-01	17.81	
BI-212	4.43E+17S	1.00	5.151E-01	5.151E-01	1.603E-01	31.13	
PB-212	4.43E+17S	1.00	7.161E-01	7.161E-01	0.642E-01	8.97	
BI-214	5.05E+10S	1.00	2.480E-01	2.480E-01	0.614E-01	24.74	
PB-214	5.05E+10S	1.00	3.331E-01	3.331E-01	0.570E-01	17.11	
RA-223	1.04E+12S	1.00	2.653E-01	2.653E-01	1.240E-01	46.76	
AC-228	4.43E+17S	1.00	6.468E-01	6.468E-01	1.371E-01	21.19	
PA-234M	1.41E+17S	1.00	6.122E-01	6.122E-01	31.19E-01	509.40	
TH-234	1.41E+17S	1.00	1.038E+00	1.038E+00	0.300E+00	28.87	
U-235	2.22E+16S	1.00	3.564E-02	3.564E-02	10.72E-02	300.66	
NP-236	4.89E+12S	1.00	3.280E-02	3.280E-02	2.972E-02	90.63	
NP-237	6.75E+13S	1.00	4.571E-01	4.571E-01	1.294E-01	28.32	
AM-243	2.33E+11S	1.00	1.210E-01	1.210E-01	0.274E-01	22.66	
CM-243	8.99E+08S	1.01	4.845E-02	4.871E-02	3.840E-02	78.83	
			---	---			
	Total Activity :		6.307E+00	6.310E+00			

Grand Total Activity : 6.307E+00 6.310E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701039 Acquisition date : 16-DEC-2007 16:47:11

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.98	60	766	1.07	93.93	90	8	1.38E-03	****	1.89E+00	
0	66.29	25	792	1.44	132.51	131	7	5.78E-04	****	5.18E+00	
2	72.78	72	518	1.36	145.47	143	18	1.66E-03	****	6.01E+00	
3	84.45	254	727	1.52	168.79	165	29	5.88E-03	46.6	7.03E+00	
3	89.98	335	577	1.05	179.82	165	29	7.75E-03	28.2	7.33E+00	
0	115.26	48	559	1.42	230.33	229	6	1.11E-03	****	7.77E+00	
0	139.97	14	605	1.56	279.70	277	7	3.21E-04	****	7.47E+00	
0	185.81	382	669	1.34	371.27	368	9	8.83E-03	33.9	6.54E+00	
0	328.06	84	391	1.43	655.48	652	8	1.95E-03	83.8	4.48E+00	
0	332.72	49	372	2.34	664.80	661	8	1.14E-03	****	4.43E+00	
0	538.11	19	264	0.64	1075.32	1069	12	4.40E-04	****	3.07E+00	
0	694.95	42	252	1.40	1388.88	1382	14	9.74E-04	****	2.48E+00	
0	771.67	82	202	1.68	1542.30	1535	14	1.89E-03	77.7	2.26E+00	
0	869.63	42	115	4.22	1738.21	1733	12	9.72E-04	****	2.03E+00	
0	898.78	19	130	1.16	1796.52	1792	11	4.51E-04	****	1.97E+00	
0	1090.10	20	54	1.07	2179.25	2176	8	4.70E-04	****	1.65E+00	
0	1151.66	15	40	1.27	2302.43	2299	6	3.40E-04	****	1.57E+00	
0	1293.77	16	43	1.11	2586.84	2581	10	3.78E-04	****	1.42E+00	
0	1301.57	36	62	1.83	2602.45	2594	14	8.29E-04	99.7	1.41E+00	
0	1333.86	23	42	1.86	2667.09	2663	8	5.42E-04	****	1.38E+00	T
0	1386.54	17	27	1.20	2772.53	2769	8	3.86E-04	****	1.34E+00	
1	1496.16	28	34	1.91	2992.00	2984	24	6.60E-04	88.0	1.26E+00	
1	1499.16	23	26	1.91	2998.00	2984	24	5.41E-04	****	1.26E+00	
0	1562.29	21	26	0.80	3124.40	3119	10	4.91E-04	****	1.23E+00	
0	1623.63	13	67	0.60	3247.25	3240	12	3.08E-04	****	1.19E+00	
0	1631.83	24	36	1.08	3263.67	3257	11	5.49E-04	****	1.19E+00	
0	1736.85	38	28	2.71	3474.01	3466	18	8.81E-04	72.0	1.15E+00	
0	1756.25	11	24	0.68	3512.86	3508	8	2.53E-04	****	1.14E+00	
0	1802.96	12	33	1.36	3606.44	3601	12	2.67E-04	****	1.12E+00	
0	1862.50	28	26	3.30	3725.71	3718	17	6.50E-04	90.7	1.11E+00	
0	1916.14	45	9	2.41	3833.18	3823	19	1.03E-03	44.6	1.09E+00	
0	1923.24	23	7	4.78	3847.40	3842	12	5.44E-04	59.0	1.09E+00	
0	1983.28	32	11	4.46	3967.71	3961	15	7.46E-04	57.3	1.08E+00	
0	2007.56	14	32	1.86	4016.36	4006	16	3.18E-04	****	1.08E+00	
0	2011.45	15	13	0.82	4024.16	4021	7	3.58E-04	90.8	1.08E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701039            *
* Acquisition date : 16-DEC-2007 16:47:11 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 12:03:06.50     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701039           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 7.7790E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	8.612E-01	3.300E-01	9.616E-02	3.300E-01
CS-137	1.313E-01	2.452E-02	1.178E-02	2.452E-02
EU-155	5.419E-02	4.187E-02	2.920E-02	4.187E-02
TL-208	1.932E-01	3.372E-02	1.041E-02	3.372E-02
BI-212	5.151E-01	1.571E-01	7.895E-02	1.571E-01
PB-212	7.161E-01	6.295E-02	1.692E-02	6.295E-02
BI-214	2.480E-01	6.013E-02	2.207E-02	6.013E-02
PB-214	3.331E-01	5.586E-02	2.162E-02	5.586E-02
RA-223	2.653E-01	1.216E-01	5.612E-02	1.216E-01
AC-228	6.468E-01	1.343E-01	3.970E-02	1.343E-01
PA-234M	6.122E-01	3.056E+00	1.269E+00	3.056E+00
TH-234	1.038E+00	2.937E-01	1.240E-01	2.937E-01
U-235	3.564E-02	1.050E-01	5.744E-02	1.050E-01
NP-236	3.280E-02	2.913E-02	1.517E-02	2.913E-02
NP-237	4.571E-01	1.268E-01	5.604E-02	1.268E-01
AM-243	1.210E-01	2.686E-02	1.250E-02	2.686E-02
CM-243	4.871E-02	3.763E-02	2.693E-02	3.763E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-2.257E-03	1.380E-02	1.102E-02	1.380E-02	FAIL ABUN
RH-101	-1.289E-02	1.719E-02	1.039E-02	1.719E-02	NOT IDENT.
SB-125	-6.927E-03	3.622E-02	2.879E-02	3.622E-02	NOT IDENT.
PO-209	4.124E-01	3.669E+00	2.266E+00	3.669E+00	NOT IDENT.
BI-211	-2.957E-01	3.640E-01	2.840E-01	3.640E-01	NOT IDENT.
PA-233	-6.746E-03	2.433E-02	1.953E-02	2.433E-02	NOT IDENT.
NP-239	2.982E-02	8.308E-02	6.876E-02	8.308E-02	NOT IDENT.
AM-241	-3.604E-03	4.608E-02	3.207E-02	4.608E-02	NOT IDENT.
AM-246	1.869E-02	4.786E-02	3.999E-02	4.786E-02	NOT IDENT.
CF-249	3.278E-03	1.578E-02	1.281E-02	1.578E-02	NOT IDENT.

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*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
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ENERGY	MDA COUNTS
59.54	704.9287
63.29	738.8717
74.66	869.1417
74.81	869.3162
74.81	869.3162
77.11	871.9710
77.11	871.9710
86.48	763.9407
87.30	764.7079
87.30	764.7079
92.58	769.5562
98.44	595.4472
103.76	697.0678
105.31	664.9155
129.07	675.8201
143.76	664.6734
198.00	629.0928
209.25	578.7378
228.18	528.7515
238.63	509.8861
242.00	510.9912
269.46	474.8597
270.25	475.0776
277.36	468.0618
295.22	434.2045
300.09	407.7708
312.17	385.3355
338.32	361.4617
351.93	361.0414
387.59	326.9821
409.46	308.8345
427.87	276.7734
463.00	245.8237
510.77	224.8430
583.19	191.1812
609.31	237.4438
661.66	198.1926
727.33	146.4187
763.13	150.3609
768.36	154.3789
785.37	122.4762
794.95	116.9140
806.17	123.1964
831.80	141.9387
860.56	125.0397
896.60	107.7161
911.20	117.5831
934.06	105.0117
964.77	96.5703
968.97	96.6690
1001.03	107.0948
1078.86	90.7535
1120.29	79.8779
1155.19	84.0630
1173.23	85.1063
1238.11	87.3555
1280.96	60.5752
1332.51	77.8784
1377.67	67.3271
1401.50	52.6003
1407.98	63.9492
1460.80	51.2732
1509.23	39.0751
1588.20	56.5829
1620.50	46.8516
1729.60	37.4672
1764.49	41.0977

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701039

Total Uranium Activity	1.6491E-02	ug/g
Total Uranium Counting Unc.	4.8589E-02	ug/g
Total Uranium Tpu	4.8589E-08	ug/g
Total Uranium Mda	2.6576E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 04:49:22.83

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*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701040.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 16-DEC-2007 16:47:48
Sample ID        : G198701040           Sample quantity  : 9.62500E+01 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 12:00:00.00        Elapsed real time: 0 12:01:06.04  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.27	146	839	1.10	91.64	88	9	3.38E-03	36.6	
2	0	63.59	344	1195	1.27	126.24	122	10	7.95E-03	19.5	
3	1	75.04	1260	1263	1.45	149.09	143	17	2.92E-02	6.2	7.28E-01
4	1	77.35*	1961	1074	1.31	153.72	143	17	4.54E-02	4.1	
5	3	84.28	298	840	1.51	167.56	164	28	6.90E-03	16.4	1.97E+00
6	3	87.38	755	1097	1.66	173.74	164	28	1.75E-02	9.0	
7	3	90.13	515	903	1.57	179.24	164	28	1.19E-02	12.0	
8	3	93.00	774	912	1.72	184.98	164	28	1.79E-02	8.7	
9	0	106.02	77	817	1.46	210.97	206	8	1.79E-03	65.0	
10	0	129.52	255	878	2.35	257.91	254	10	5.90E-03	22.6	
11	0	153.71	88	852	1.54	306.22	303	9	2.04E-03	60.7	
12	0	186.07*	383	872	1.65	370.86	366	11	8.86E-03	17.3	
13	0	209.40	217	697	1.19	417.46	413	9	5.02E-03	23.0	
14	0	212.90	38	492	1.46	424.45	422	7	8.91E-04	97.3	
15	2	238.70*	2411	482	1.50	475.99	468	22	5.58E-02	3.0	3.08E+00
16	2	241.63	623	570	1.91	481.86	468	22	1.44E-02	10.7	
17	0	259.98	43	546	2.09	518.52	511	10	9.93E-04	103.5	
18	0	269.93	207	580	1.82	538.38	534	11	4.80E-03	23.5	
19	0	277.46	121	487	1.46	553.43	549	9	2.81E-03	34.0	
20	0	295.36*	526	560	1.47	589.19	584	11	1.22E-02	11.4	
21	0	300.32	180	520	1.28	599.11	595	11	4.16E-03	25.9	
22	0	328.92	113	477	2.22	656.25	649	11	2.62E-03	38.7	
23	0	338.25	430	619	1.33	674.89	668	15	9.96E-03	13.5	
24	0	352.11*	1011	437	1.57	702.58	696	13	2.34E-02	5.9	
25	0	409.27	37	352	1.15	816.81	812	11	8.56E-04	99.6	
26	0	454.51	34	242	2.38	907.20	904	9	7.85E-04	85.1	
27	0	463.20	167	393	1.64	924.58	917	16	3.87E-03	27.6	
28	0	511.04*	196	415	2.08	1020.19	1011	20	4.53E-03	37.5	
29	0	568.78*	182	320	2.58	1135.61	1129	18	4.22E-03	25.4	
30	0	583.39*	558	261	1.62	1164.80	1158	14	1.29E-02	8.8	
31	0	609.56*	601	229	1.70	1217.11	1210	14	1.39E-02	7.9	
32	0	661.81	400	187	1.45	1321.58	1314	13	9.25E-03	8.7	
33	0	727.08*	78	205	1.65	1452.07	1448	14	1.80E-03	45.8	
34	0	756.20	43	74	2.33	1510.30	1507	7	9.99E-04	36.5	
35	0	770.92	66	266	4.51	1539.74	1528	18	1.54E-03	59.3	
36	0	795.07	51	132	1.98	1588.02	1582	12	1.18E-03	47.2	
37	0	860.52	80	105	1.44	1718.90	1713	12	1.86E-03	27.9	
38	0	883.29	49	97	3.98	1764.46	1756	14	1.13E-03	45.3	

Sample ID : G198701040 Acquisition date : 16-DEC-2007 16:47:48

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	2	911.59	336	105	2.07	1821.05	1813	29	7.78E-03	8.1	9.79E-01
40	2	918.19	34	109	2.37	1834.26	1813	29	7.79E-04	70.8	
41	4	965.07	65	120	2.20	1928.02	1920	32	1.49E-03	35.5	1.16E+00
42	4	969.48	197	91	2.06	1936.85	1920	32	4.56E-03	12.1	
43	0	1002.75	61	78	0.72	2003.41	1997	15	1.41E-03	34.3	
44	0	1121.14	169	111	1.66	2240.25	2232	17	3.90E-03	16.2	
45	0	1239.44	77	122	2.31	2476.97	2469	21	1.79E-03	37.3	
46	0	1378.99	35	44	0.82	2756.30	2752	10	8.07E-04	39.7	
47	0	1432.10	18	16	1.29	2862.61	2858	8	4.06E-04	47.7	
48	0	1461.52	418	55	2.15	2921.52	2913	17	9.68E-03	6.4	
49	3	1588.74	28	54	2.94	3176.26	3169	21	6.41E-04	61.5	1.89E+00
50	3	1593.32	26	39	1.85	3185.43	3169	21	6.06E-04	45.8	
51	0	1606.98	22	52	7.69	3212.77	3201	18	5.01E-04	82.2	
52	0	1622.61	78	46	5.48	3244.09	3233	23	1.80E-03	25.4	
53	0	1733.49	72	40	8.28	3466.16	3454	23	1.66E-03	25.8	
54	0	1765.72	113	33	1.83	3530.72	3522	19	2.62E-03	15.4	
55	0	1952.60	16	34	3.48	3905.13	3893	15	3.71E-04	82.9	
56	0	1976.41	11	20	1.27	3952.86	3945	10	2.57E-04	84.2	
57	0	1990.75	6	22	1.38	3981.59	3974	9	1.47E-04	139.5	
58	7	2007.28	7	4	1.23	4014.72	4013	15	1.72E-04	48.1	1.34E+00
59	7	2011.18	25	13	3.19	4022.52	4013	15	5.86E-04	34.0	
60	0	2027.35	34	27	6.08	4054.94	4046	17	7.93E-04	40.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701040       *
* Acquisition date : 16-DEC-2007 16:47:48 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 12:01:06.04     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701040           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 9.6250E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.433E+00	4.666E-01	3.018E-01	0.000E+00
CS-137	1.870E-01	3.512E-02	3.202E-02	0.000E+00
EU-155	3.012E-02	3.845E-02	5.358E-02	0.000E+00
TL-208	2.289E-01	4.291E-02	2.714E-02	0.000E+00
BI-212	2.885E-01	2.600E-01	2.096E-01	0.000E+00
PB-212	7.688E-01	6.458E-02	3.585E-02	0.000E+00
BI-214	4.740E-01	8.144E-02	5.148E-02	0.000E+00
PB-214	5.455E-01	6.937E-02	4.810E-02	0.000E+00
RA-223	2.347E-01	1.087E-01	1.147E-01	0.000E+00
AC-228	7.169E-01	1.230E-01	1.047E-01	0.000E+00
PA-234M	4.381E+00	2.959E+00	3.272E+00	0.000E+00
TH-234	1.103E+00	2.053E-01	2.045E-01	0.000E+00
NP-237	4.638E-01	8.856E-02	8.786E-02	0.000E+00
AM-243	1.389E-01	1.943E-02	1.752E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	5.220E-03		1.940E-02	3.262E-02	0.000E+00	NOT IDENT.
RH-101	8.635E-03		1.291E-02	2.222E-02	0.000E+00	NOT IDENT.
SB-125	-2.612E-02		4.438E-02	7.159E-02	0.000E+00	NOT IDENT.
PO-209	-1.179E+00		3.602E+00	5.902E+00	0.000E+00	NOT IDENT.
BI-211	-5.571E-01		5.001E-01	7.823E-01	0.000E+00	NOT IDENT.
PA-233	5.280E-03		2.683E-02	4.515E-02	0.000E+00	NOT IDENT.
U-235	1.114E-01		7.358E-02	1.227E-01	0.000E+00	NOT IDENT.
NP-236	2.542E-03		1.957E-02	2.808E-02	0.000E+00	NOT IDENT.
NP-239	-4.254E-02		8.450E-02	1.408E-01	0.000E+00	NOT IDENT.
AM-241	2.451E-02		2.059E-02	3.088E-02	0.000E+00	NOT IDENT.
CM-243	7.284E-05		3.443E-02	4.912E-02	0.000E+00	NOT IDENT.
AM-246	-4.905E-02		9.370E-02	1.134E-01	0.000E+00	NOT IDENT.
CF-249	3.997E-03		1.834E-02	3.065E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 04:49:23.75

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701040.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 16-DEC-2007 16:47:48
Sample ID        : G198701040           Sample quantity  : 9.62500E+01 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 12:00:00.00        Elapsed real time: 0 12:01:06.04  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	418	10.66*	7.430E-01	3.433E+00	3.433E+00	13.87
CS-137	661.66	400	85.10*	1.641E+00	1.861E-01	1.870E-01	19.16
EU-155	105.31	77	21.20*	8.120E+00	2.922E-02	3.012E-02	130.26
TL-208	277.36	121	6.31	4.078E+00	3.065E-01	3.065E-01	68.29
	510.77	196	22.60	2.158E+00	2.607E-01	2.607E-01	75.33
	583.19	558	84.50*	1.875E+00	2.289E-01	2.289E-01	19.13
	763.13	------	1.81	1.415E+00	------	Line Not Found	------
	860.56	80	12.42	1.251E+00	3.354E-01	3.354E-01	56.23
BI-212	727.33	78	11.80*	1.487E+00	2.885E-01	2.885E-01	91.97
	785.37	------	1.10	1.374E+00	------	Line Not Found	------
	1620.50	------	1.49	6.722E-01	------	Line Not Found	------
PB-212	74.81	1260	10.40	8.644E+00	9.110E-01	9.110E-01	14.27
	77.11	1961	17.50	8.639E+00	8.432E-01	8.432E-01	10.76
	87.30	755	7.81	8.536E+00	7.363E-01	7.363E-01	19.49
	238.63	2411	43.30*	4.707E+00	7.688E-01	7.688E-01	8.57
	300.09	180	3.28	3.770E+00	9.443E-01	9.443E-01	52.00
BI-214	609.31	601	46.10*	1.789E+00	4.739E-01	4.740E-01	17.53
	768.36	------	4.94	1.405E+00	------	Line Not Found	------
	806.17	------	1.22	1.337E+00	------	Line Not Found	------
	934.06	------	3.03	1.152E+00	------	Line Not Found	------
	1120.29	169	15.10	9.612E-01	7.546E-01	7.547E-01	33.00
	1155.19	------	1.63	9.335E-01	------	Line Not Found	------
	1238.11	77	5.79	8.716E-01	9.965E-01	9.966E-01	74.81
	1280.96	------	1.43	8.442E-01	------	Line Not Found	------
	1377.67	35	4.00	7.860E-01	7.204E-01	7.205E-01	79.61
	1401.50	------	1.27	7.738E-01	------	Line Not Found	------
	1407.98	------	2.15	7.704E-01	------	Line Not Found	------
	1509.23	------	2.11	7.203E-01	------	Line Not Found	------
	1729.60	------	2.92	6.308E-01	------	Line Not Found	------
	1764.49	113	15.40	6.181E-01	7.728E-01	7.729E-01	31.33
PB-214	74.81	1260	6.44	8.644E+00	1.471E+00	1.471E+00	14.27
	77.11	1961	10.80	8.639E+00	1.366E+00	1.366E+00	10.76

Sample ID : G198701040 Acquisition date : 16-DEC-2007 16:47:48

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	755	4.84	8.536E+00	1.188E+00	1.188E+00	19.49
	242.00	623	7.43	4.654E+00	1.170E+00	1.170E+00	22.31
	295.22	526	19.30	3.833E+00	4.620E-01	4.620E-01	23.32
	351.93	1011	37.60*	3.203E+00	5.455E-01	5.455E-01	12.97
RA-223	269.46	207	13.70*	4.189E+00	2.347E-01	2.347E-01	47.27
AC-228	129.07	255	2.42	7.431E+00	9.212E-01	9.212E-01	45.97
	209.25	217	3.89	5.290E+00	6.851E-01	6.851E-01	46.41
	270.25	207	3.46	4.189E+00	9.293E-01	9.293E-01	47.27
	338.32	430	11.27	3.340E+00	7.435E-01	7.435E-01	27.41
	409.46	37	1.92	2.735E+00	4.580E-01	4.580E-01	199.19
	463.00	167	4.40	2.397E+00	1.031E+00	1.031E+00	55.48
	794.95	51	4.25	1.356E+00	5.751E-01	5.751E-01	94.68
	911.20	336	25.80*	1.180E+00	7.169E-01	7.169E-01	17.50
	964.77	65	4.99	1.115E+00	7.544E-01	7.544E-01	71.28
	968.97	197	15.80	1.110E+00	7.300E-01	7.300E-01	25.13
	1588.20	28	3.22	6.853E-01	8.158E-01	8.158E-01	123.11
PA-234M	1001.03	61	0.84*	1.073E+00	4.381E+00	4.381E+00	68.91
TH-234	63.29	344	4.80	8.522E+00	5.459E-01	5.459E-01	39.66
	92.58	774	5.41*	8.433E+00	1.103E+00	1.103E+00	18.99
NP-237	86.48	755	12.40*	8.536E+00	4.638E-01	4.638E-01	19.49
AM-243	74.66	1260	68.20*	8.644E+00	1.389E-01	1.389E-01	14.27

Flag: "*" = Keyline

Sample ID : G198701040 Acquisition date : 16-DEC-2007 16:47:48

Total number of lines in spectrum	60	
Number of unidentified lines	25	
Number of lines tentatively identified by NID	35	58.33%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.433E+00	3.433E+00	0.476E+00	13.87	
CS-137	9.47E+08S	1.01	1.861E-01	1.870E-01	0.358E-01	19.16	
EU-155	1.57E+08S	1.03	2.922E-02	3.012E-02	3.924E-02	130.26	
TL-208	4.43E+17S	1.00	2.289E-01	2.289E-01	0.438E-01	19.13	
BI-212	4.43E+17S	1.00	2.885E-01	2.885E-01	2.653E-01	91.97	
PB-212	4.43E+17S	1.00	7.688E-01	7.688E-01	0.659E-01	8.57	
BI-214	5.05E+10S	1.00	4.739E-01	4.740E-01	0.831E-01	17.53	
PB-214	5.05E+10S	1.00	5.455E-01	5.455E-01	0.708E-01	12.97	
RA-223	1.04E+12S	1.00	2.347E-01	2.347E-01	1.109E-01	47.27	
AC-228	4.43E+17S	1.00	7.169E-01	7.169E-01	1.255E-01	17.50	
PA-234M	1.41E+17S	1.00	4.381E+00	4.381E+00	3.019E+00	68.91	
TH-234	1.41E+17S	1.00	1.103E+00	1.103E+00	0.210E+00	18.99	
NP-237	6.75E+13S	1.00	4.638E-01	4.638E-01	0.904E-01	19.49	
AM-243	2.33E+11S	1.00	1.389E-01	1.389E-01	0.198E-01	14.27	
			---	---			
	Total Activity :		1.299E+01	1.299E+01			

Grand Total Activity : 1.299E+01 1.299E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701040 Acquisition date : 16-DEC-2007 16:47:48

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.27	146	839	1.10	91.64	88	9	3.38E-03	73.3	7.63E+00	
3	84.28	298	840	1.51	167.56	164	28	6.90E-03	32.9	8.58E+00	
3	90.13	515	903	1.57	179.24	164	28	1.19E-02	24.0	8.49E+00	
0	153.71	88	852	1.54	306.22	303	9	2.04E-03	****	6.71E+00	
0	186.07	383	872	1.65	370.86	366	11	8.86E-03	34.7	5.83E+00	
0	212.90	38	492	1.46	424.45	422	7	8.91E-04	****	5.21E+00	
0	259.98	43	546	2.09	518.52	511	10	9.93E-04	****	4.34E+00	
0	328.92	113	477	2.22	656.25	649	11	2.62E-03	77.4	3.44E+00	
0	454.51	34	242	2.38	907.20	904	9	7.85E-04	****	2.45E+00	
0	568.78	182	320	2.58	1135.61	1129	18	4.22E-03	50.8	1.93E+00	
0	756.20	43	74	2.33	1510.30	1507	7	9.99E-04	73.1	1.43E+00	
0	770.92	66	266	4.51	1539.74	1528	18	1.54E-03	****	1.40E+00	
0	883.29	49	97	3.98	1764.46	1756	14	1.13E-03	90.6	1.22E+00	
2	918.19	34	109	2.37	1834.26	1813	29	7.79E-04	****	1.17E+00	
0	1432.10	18	16	1.29	2862.61	2858	8	4.06E-04	95.4	7.58E-01	
3	1593.32	26	39	1.85	3185.43	3169	21	6.06E-04	91.6	6.83E-01	
0	1606.98	22	52	7.69	3212.77	3201	18	5.01E-04	****	6.78E-01	
0	1622.61	78	46	5.48	3244.09	3233	23	1.80E-03	50.8	6.71E-01	
0	1733.49	72	40	8.28	3466.16	3454	23	1.66E-03	51.6	6.29E-01	
0	1952.60	16	34	3.48	3905.13	3893	15	3.71E-04	****	5.59E-01	
0	1976.41	11	20	1.27	3952.86	3945	10	2.57E-04	****	5.52E-01	
0	1990.75	6	22	1.38	3981.59	3974	9	1.47E-04	****	5.48E-01	
7	2007.28	7	4	1.23	4014.72	4013	15	1.72E-04	96.1	5.44E-01	
7	2011.18	25	13	3.19	4022.52	4013	15	5.86E-04	67.9	5.43E-01	
0	2027.35	34	27	6.08	4054.94	4046	17	7.93E-04	79.9	5.38E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701040            *
* Acquisition date : 16-DEC-2007 16:47:48 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 12:01:06.04     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701040           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 9.6250E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.433E+00	4.666E-01	1.510E-01	4.666E-01
CS-137	1.870E-01	3.512E-02	1.602E-02	3.512E-02
EU-155	3.012E-02	3.845E-02	2.681E-02	3.845E-02
TL-208	2.289E-01	4.291E-02	1.358E-02	4.291E-02
BI-212	2.885E-01	2.600E-01	1.049E-01	2.600E-01
PB-212	7.688E-01	6.458E-02	1.793E-02	6.458E-02
BI-214	4.740E-01	8.144E-02	2.576E-02	8.144E-02
PB-214	5.455E-01	6.937E-02	2.406E-02	6.937E-02
RA-223	2.347E-01	1.087E-01	5.738E-02	1.087E-01
AC-228	7.169E-01	1.230E-01	5.236E-02	1.230E-01
PA-234M	4.381E+00	2.959E+00	1.637E+00	2.959E+00
TH-234	1.103E+00	2.053E-01	1.023E-01	2.053E-01
NP-237	4.638E-01	8.856E-02	4.396E-02	8.856E-02
AM-243	1.389E-01	1.943E-02	8.764E-03	1.943E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	5.220E-03	1.940E-02	1.632E-02	1.940E-02	NOT IDENT.
RH-101	8.635E-03	1.291E-02	1.112E-02	1.291E-02	NOT IDENT.
SB-125	-2.612E-02	4.438E-02	3.581E-02	4.438E-02	NOT IDENT.
PO-209	-1.179E+00	3.602E+00	2.953E+00	3.602E+00	NOT IDENT.
BI-211	-5.571E-01	5.001E-01	3.914E-01	5.001E-01	NOT IDENT.
PA-233	5.280E-03	2.683E-02	2.259E-02	2.683E-02	NOT IDENT.
U-235	1.114E-01	7.358E-02	6.138E-02	7.358E-02	NOT IDENT.
NP-236	2.542E-03	1.957E-02	1.405E-02	1.957E-02	NOT IDENT.
NP-239	-4.254E-02	8.450E-02	7.045E-02	8.450E-02	NOT IDENT.
AM-241	2.451E-02	2.059E-02	1.545E-02	2.059E-02	NOT IDENT.
CM-243	7.284E-05	3.443E-02	2.457E-02	3.443E-02	NOT IDENT.
AM-246	-4.905E-02	9.370E-02	5.674E-02	9.370E-02	NOT IDENT.
CF-249	3.997E-03	1.834E-02	1.534E-02	1.834E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	849.3812
63.29	978.9002
74.66	1185.0021
74.81	1185.1920
74.81	1185.1920
77.11	1188.1025
77.11	1188.1025
86.48	964.2923
87.30	965.0734
87.30	965.0734
92.58	970.0096
98.44	862.5756
103.76	939.0972
105.31	894.0123
129.07	904.5070
143.76	854.0918
198.00	769.9797
209.25	793.6774
228.18	649.2737
238.63	594.4625
242.00	595.5276
269.46	484.1330
270.25	522.1469
277.36	553.3813
295.22	477.2264
300.09	525.3267
312.17	433.3472
338.32	410.6484
351.93	374.2054
387.59	370.5571
409.46	325.8359
427.87	338.3306
463.00	266.4796
510.77	247.9505
583.19	206.1410
609.31	201.2056
661.66	220.7568
727.33	150.8321
763.13	165.4833
768.36	173.0778
785.37	145.3083
794.95	133.2723
806.17	141.2703
831.80	161.3384
860.56	128.5813
896.60	133.5298
911.20	113.4276
934.06	110.0631
964.77	119.6928
968.97	119.7987
1001.03	97.3922
1078.86	112.3730
1120.29	96.9482
1155.19	98.6133
1173.23	87.6044
1238.11	80.4450
1280.96	70.3942
1332.51	69.9531
1377.67	65.9029
1401.50	77.1855
1407.98	75.1213
1460.80	63.8494
1509.23	68.2262
1588.20	65.2603
1620.50	58.9164
1729.60	45.6021
1764.49	52.6096

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701040

Total Uranium Activity	5.1552E-02	ug/g
Total Uranium Counting Unc.	3.4046E-02	ug/g
Total Uranium Tpu	3.4046E-08	ug/g
Total Uranium Mda	2.8402E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 14:14:13.37

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701041.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:13:20
Sample ID        : G198701041           Sample quantity  : 1.09230E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:17.46  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.84	50	207	2.13	92.78	88	10	4.60E-03	56.0	
2	0	65.10	24	363	1.52	129.25	120	11	2.20E-03	156.5	
3	2	75.00	296	283	1.69	149.02	141	21	2.74E-02	13.0	1.77E+00
4	2	77.36*	371	217	1.40	153.74	141	21	3.44E-02	9.3	
5	1	86.87	156	231	1.56	172.72	163	28	1.45E-02	19.6	4.73E+00
6	1	89.87	87	226	1.56	178.72	163	28	8.08E-03	34.6	
7	1	93.10	148	221	1.57	185.16	163	28	1.37E-02	20.8	
8	0	161.96	15	100	1.24	322.70	320	6	1.42E-03	106.8	
9	0	185.88*	105	251	1.66	370.48	365	13	9.75E-03	33.3	
10	0	238.49*	340	253	1.49	475.57	471	10	3.15E-02	10.7	
11	0	242.00	72	125	1.85	482.60	480	7	6.62E-03	29.4	
12	0	245.95	56	84	2.44	490.47	487	8	5.21E-03	31.4	
13	0	269.62	53	161	1.89	537.76	530	14	4.90E-03	52.7	
14	0	295.13*	182	150	1.35	588.73	583	12	1.68E-02	16.1	
15	0	338.82	56	175	2.15	676.02	669	14	5.16E-03	52.5	
16	0	352.08*	311	102	1.52	702.52	695	13	2.88E-02	9.1	
17	0	406.68	31	48	0.74	811.62	805	11	2.83E-03	48.0	
18	0	464.26	18	56	1.71	926.70	921	9	1.71E-03	76.7	
19	3	510.93*	9	44	2.34	1019.98	1012	42	8.78E-04	245.4	1.83E+00
20	3	521.45	24	29	1.77	1041.00	1012	42	2.19E-03	53.6	
21	3	524.00	27	36	2.35	1046.09	1012	42	2.54E-03	55.8	
22	0	568.39*	44	30	1.53	1134.83	1129	12	4.03E-03	30.8	
23	0	583.74*	97	40	1.57	1165.50	1160	12	8.97E-03	18.3	
24	6	606.08	10	22	1.47	1210.15	1208	16	9.38E-04	72.2	3.37E+00
25	6	609.49*	159	51	1.97	1216.97	1208	16	1.47E-02	13.0	
26	0	661.67	166	35	1.39	1321.29	1315	12	1.53E-02	10.6	
27	0	678.58	17	53	3.90	1355.09	1345	15	1.53E-03	98.8	
28	0	710.80	19	19	1.11	1419.51	1416	8	1.74E-03	46.9	
29	0	715.11	26	13	1.59	1428.14	1424	9	2.42E-03	31.9	
30	0	738.61	14	12	1.44	1475.12	1470	8	1.31E-03	50.0	
31	0	860.60	20	11	1.59	1719.07	1714	9	1.81E-03	38.1	
32	0	877.32	13	6	1.16	1752.51	1749	7	1.25E-03	39.4	
33	0	911.50	65	30	0.79	1820.88	1815	12	6.02E-03	20.9	
34	0	969.62	34	29	2.18	1937.12	1931	12	3.19E-03	35.9	
35	0	993.33	16	21	0.47	1984.56	1977	14	1.48E-03	65.7	
36	0	1035.63	15	30	5.64	2069.17	2051	20	1.39E-03	93.1	
37	0	1060.49	21	11	4.92	2118.91	2111	14	1.99E-03	38.6	
38	0	1069.32	13	22	0.91	2136.58	2128	17	1.22E-03	84.6	

Sample ID : G198701041 Acquisition date : 17-DEC-2007 11:13:20

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1120.80	39	18	1.46	2239.58	2234	13	3.59E-03	28.3	
40	0	1156.15	21	9	2.78	2310.30	2304	13	1.92E-03	37.9	
41	0	1175.31	13	31	0.46	2348.64	2339	14	1.18E-03	97.3	
42	0	1281.71	19	14	0.55	2561.58	2554	14	1.76E-03	47.7	
43	0	1301.51*	9	5	1.03	2601.20	2596	10	8.46E-04	73.0	
44	0	1354.95	8	10	0.45	2708.17	2698	14	7.72E-04	88.8	
45	0	1379.22	16	14	2.85	2756.75	2747	14	1.46E-03	56.3	
46	0	1461.34	149	21	1.81	2921.16	2912	17	1.38E-02	10.9	
47	0	1593.52	13	10	1.67	3185.83	3177	14	1.24E-03	57.9	
48	0	1703.30	18	4	3.81	3405.68	3400	13	1.70E-03	31.0	
49	0	1765.23	31	9	1.51	3529.73	3524	12	2.83E-03	26.8	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701041       *
* Acquisition date : 17-DEC-2007 11:13:20 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:17.46     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701041           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0923E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.297E+00	9.437E-01	4.816E-01	0.000E+00
CS-137	2.729E-01	6.087E-02	6.527E-02	0.000E+00
TL-208	1.403E-01	5.120E-02	4.942E-02	0.000E+00
PB-212	3.818E-01	8.326E-02	6.920E-02	0.000E+00
BI-214	4.421E-01	1.170E-01	9.134E-02	0.000E+00
PB-214	5.918E-01	1.094E-01	8.988E-02	0.000E+00
RA-223	2.111E-01	2.182E-01	2.041E-01	0.000E+00
TH-234	7.412E-01	3.076E-01	3.423E-01	0.000E+00
NP-237	3.376E-01	1.320E-01	1.471E-01	0.000E+00
AM-243	1.149E-01	3.024E-02	3.011E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	4.771E-02		4.564E-02	7.657E-02	0.000E+00	NOT IDENT.
RH-101	8.481E-03		2.285E-02	4.007E-02	0.000E+00	NOT IDENT.
SB-125	-2.058E-02		7.816E-02	1.279E-01	0.000E+00	NOT IDENT.
EU-155	1.512E-02		5.538E-02	9.353E-02	0.000E+00	NOT IDENT.
PO-209	-8.856E-01		5.839E+00	9.637E+00	0.000E+00	NOT IDENT.
BI-211	2.955E-01		8.643E-01	1.518E+00	0.000E+00	NOT IDENT.
BI-212	8.032E-02		2.769E-01	4.701E-01	0.000E+00	NOT IDENT.
AC-228	0.000E+00		2.031E-01	3.397E-01	0.000E+00	FAIL ABUN
PA-233	-1.210E-02		4.770E-02	7.951E-02	0.000E+00	NOT IDENT.
PA-234M	7.017E-01		3.701E+00	5.922E+00	0.000E+00	NOT IDENT.
U-235	-5.755E-02		1.187E-01	1.904E-01	0.000E+00	NOT IDENT.
NP-236	1.586E-02		3.330E-02	5.016E-02	0.000E+00	NOT IDENT.
NP-239	9.216E-02		1.509E-01	2.669E-01	0.000E+00	NOT IDENT.
AM-241	-7.667E-03		3.673E-02	5.369E-02	0.000E+00	NOT IDENT.
CM-243	-4.299E-02		4.962E-02	7.877E-02	0.000E+00	NOT IDENT.
AM-246	4.151E-03		1.315E-01	2.041E-01	0.000E+00	NOT IDENT.
CF-249	1.364E-02		2.911E-02	5.067E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 14:14:14.36

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701041.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:13:20
Sample ID        : G198701041           Sample quantity  : 1.09230E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:17.46  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	149	10.66*	7.431E-01	4.297E+00	4.297E+00	22.41
CS-137	661.66	166	85.10*	1.641E+00	2.715E-01	2.729E-01	22.76
TL-208	277.36	------	6.31	4.080E+00	------	Line Not Found	------
	510.77	9	22.60	2.159E+00	4.453E-02	4.453E-02	490.87
	583.19	97	84.50*	1.873E+00	1.403E-01	1.403E-01	37.24
	763.13	------	1.81	1.415E+00	------	Line Not Found	------
	860.56	20	12.42	1.251E+00	2.875E-01	2.875E-01	76.62
PB-212	74.81	296	10.40	8.644E+00	7.532E-01	7.532E-01	26.87
	77.11	371	17.50	8.639E+00	5.625E-01	5.625E-01	19.96
	87.30	156	7.81	8.543E+00	5.360E-01	5.360E-01	39.90
	238.63	340	43.30*	4.711E+00	3.818E-01	3.818E-01	22.25
	300.09	------	3.28	3.773E+00	------	Line Not Found	------
BI-214	609.31	159	46.10*	1.790E+00	4.420E-01	4.421E-01	27.01
	768.36	------	4.94	1.405E+00	------	Line Not Found	------
	806.17	------	1.22	1.337E+00	------	Line Not Found	------
	934.06	------	3.03	1.152E+00	------	Line Not Found	------
	1120.29	39	15.10	9.615E-01	6.121E-01	6.122E-01	56.87
	1155.19	21	1.63	9.327E-01	3.122E+00	3.122E+00	76.03
	1238.11	------	5.79	8.725E-01	------	Line Not Found	------
	1280.96	19	1.43	8.437E-01	3.608E+00	3.608E+00	95.47
	1377.67	16	4.00	7.859E-01	1.152E+00	1.152E+00	112.64
	1401.50	------	1.27	7.738E-01	------	Line Not Found	------
	1407.98	------	2.15	7.704E-01	------	Line Not Found	------
	1509.23	------	2.11	7.203E-01	------	Line Not Found	------
	1729.60	------	2.92	6.308E-01	------	Line Not Found	------
	1764.49	31	15.40	6.182E-01	7.351E-01	7.352E-01	53.89
PB-214	74.81	296	6.44	8.644E+00	1.216E+00	1.217E+00	26.87
	77.11	371	10.80	8.639E+00	9.115E-01	9.116E-01	19.96
	87.30	156	4.84	8.543E+00	8.650E-01	8.651E-01	39.90
	242.00	72	7.43	4.647E+00	4.744E-01	4.745E-01	59.12
	295.22	182	19.30	3.836E+00	5.619E-01	5.619E-01	32.58
	351.93	311	37.60*	3.204E+00	5.917E-01	5.918E-01	18.87

Sample ID : G198701041 Acquisition date : 17-DEC-2007 11:13:20

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
RA-223	269.46	53	13.70*	4.194E+00	2.111E-01	2.111E-01	105.45
TH-234	63.29	24	4.80	8.554E+00	1.327E-01	1.327E-01	312.98
	92.58	148	5.41*	8.431E+00	7.412E-01	7.412E-01	42.35
NP-237	86.48	156	12.40*	8.543E+00	3.376E-01	3.376E-01	39.90
AM-243	74.66	296	68.20*	8.644E+00	1.149E-01	1.149E-01	26.87

Flag: "*" = Keyline

Sample ID : G198701041 Acquisition date : 17-DEC-2007 11:13:20

Total number of lines in spectrum	49	
Number of unidentified lines	24	
Number of lines tentatively identified by NID	25	51.02%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.297E+00	4.297E+00	0.963E+00	22.41	
CS-137	9.47E+08S	1.01	2.715E-01	2.729E-01	0.621E-01	22.76	
TL-208	4.43E+17S	1.00	1.403E-01	1.403E-01	0.522E-01	37.24	
PB-212	4.43E+17S	1.00	3.818E-01	3.818E-01	0.850E-01	22.25	
BI-214	5.05E+10S	1.00	4.420E-01	4.421E-01	1.194E-01	27.01	
PB-214	5.05E+10S	1.00	5.917E-01	5.918E-01	1.117E-01	18.87	
RA-223	1.04E+12S	1.00	2.111E-01	2.111E-01	2.227E-01	105.45	
TH-234	1.41E+17S	1.00	7.412E-01	7.412E-01	3.139E-01	42.35	
NP-237	6.75E+13S	1.00	3.376E-01	3.376E-01	1.347E-01	39.90	
AM-243	2.33E+11S	1.00	1.149E-01	1.149E-01	0.309E-01	26.87	
			---	---			
		Total Activity :	7.529E+00	7.530E+00			

Grand Total Activity : 7.529E+00 7.530E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701041 Acquisition date : 17-DEC-2007 11:13:20

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.84	50	207	2.13	92.78	88	10	4.60E-03	****	7.68E+00	
1	89.87	87	226	1.56	178.72	163	28	8.08E-03	69.2	8.49E+00	
0	161.96	15	100	1.24	322.70	320	6	1.42E-03	****	6.47E+00	
0	185.88	105	251	1.66	370.48	365	13	9.75E-03	66.6	5.84E+00	
0	245.95	56	84	2.44	490.47	487	8	5.21E-03	62.8	4.58E+00	
0	338.82	56	175	2.15	676.02	669	14	5.16E-03	****	3.33E+00	T
0	406.68	31	48	0.74	811.62	805	11	2.83E-03	96.0	2.75E+00	
0	464.26	18	56	1.71	926.70	921	9	1.71E-03	****	2.39E+00	T
3	521.45	24	29	1.77	1041.00	1012	42	2.19E-03	****	2.11E+00	
3	524.00	27	36	2.35	1046.09	1012	42	2.54E-03	****	2.10E+00	
0	568.39	44	30	1.53	1134.83	1129	12	4.03E-03	61.6	1.93E+00	
6	606.08	10	22	1.47	1210.15	1208	16	9.38E-04	****	1.80E+00	
0	678.58	17	53	3.90	1355.09	1345	15	1.53E-03	****	1.60E+00	
0	710.80	19	19	1.11	1419.51	1416	8	1.74E-03	93.7	1.52E+00	
0	715.11	26	13	1.59	1428.14	1424	9	2.42E-03	63.8	1.51E+00	
0	738.61	14	12	1.44	1475.12	1470	8	1.31E-03	99.9	1.46E+00	
0	877.32	13	6	1.16	1752.51	1749	7	1.25E-03	78.8	1.23E+00	
0	911.50	65	30	0.79	1820.88	1815	12	6.02E-03	41.9	1.18E+00	T
0	969.62	34	29	2.18	1937.12	1931	12	3.19E-03	71.9	1.11E+00	T
0	993.33	16	21	0.47	1984.56	1977	14	1.48E-03	****	1.08E+00	
0	1035.63	15	30	5.64	2069.17	2051	20	1.39E-03	****	1.04E+00	
0	1060.49	21	11	4.92	2118.91	2111	14	1.99E-03	77.2	1.02E+00	
0	1069.32	13	22	0.91	2136.58	2128	17	1.22E-03	****	1.01E+00	
0	1175.31	13	31	0.46	2348.64	2339	14	1.18E-03	****	9.18E-01	
0	1301.51	9	5	1.03	2601.20	2596	10	8.46E-04	****	8.31E-01	
0	1354.95	8	10	0.45	2708.17	2698	14	7.72E-04	****	8.00E-01	
0	1593.52	13	10	1.67	3185.83	3177	14	1.24E-03	****	6.83E-01	
0	1703.30	18	4	3.81	3405.68	3400	13	1.70E-03	62.0	6.40E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701041            *
* Acquisition date : 17-DEC-2007 11:13:20 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:17.46     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701041           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0923E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.297E+00	9.437E-01	2.410E-01	9.437E-01
CS-137	2.729E-01	6.087E-02	3.266E-02	6.087E-02
TL-208	1.403E-01	5.120E-02	2.472E-02	5.120E-02
PB-212	3.818E-01	8.326E-02	3.462E-02	8.326E-02
BI-214	4.421E-01	1.170E-01	4.570E-02	1.170E-01
PB-214	5.918E-01	1.094E-01	4.497E-02	1.094E-01
RA-223	2.111E-01	2.182E-01	1.021E-01	2.182E-01
TH-234	7.412E-01	3.076E-01	1.713E-01	3.076E-01
NP-237	3.376E-01	1.320E-01	7.360E-02	1.320E-01
AM-243	1.149E-01	3.024E-02	1.507E-02	3.024E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	4.771E-02	4.564E-02	3.831E-02	4.564E-02	NOT IDENT.
RH-101	8.481E-03	2.285E-02	2.005E-02	2.285E-02	NOT IDENT.
SB-125	-2.058E-02	7.816E-02	6.399E-02	7.816E-02	NOT IDENT.
EU-155	1.512E-02	5.538E-02	4.679E-02	5.538E-02	NOT IDENT.
PO-209	-8.856E-01	5.839E+00	4.821E+00	5.839E+00	NOT IDENT.
BI-211	2.955E-01	8.643E-01	7.592E-01	8.643E-01	NOT IDENT.
BI-212	8.032E-02	2.769E-01	2.352E-01	2.769E-01	NOT IDENT.
AC-228	4.889E-01	2.031E-01	1.699E-01	2.031E-01	FAIL ABUN
PA-233	-1.210E-02	4.770E-02	3.978E-02	4.770E-02	NOT IDENT.
PA-234M	7.017E-01	3.701E+00	2.963E+00	3.701E+00	NOT IDENT.
U-235	-5.755E-02	1.187E-01	9.526E-02	1.187E-01	NOT IDENT.
NP-236	1.586E-02	3.330E-02	2.510E-02	3.330E-02	NOT IDENT.
NP-239	9.216E-02	1.509E-01	1.335E-01	1.509E-01	NOT IDENT.
AM-241	-7.667E-03	3.673E-02	2.686E-02	3.673E-02	NOT IDENT.
CM-243	-4.299E-02	4.962E-02	3.941E-02	4.962E-02	NOT IDENT.
AM-246	4.151E-03	1.315E-01	1.021E-01	1.315E-01	NOT IDENT.
CF-249	1.364E-02	2.911E-02	2.535E-02	2.911E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	233.7444
63.29	263.5341
74.66	269.6613
74.81	269.7045
74.81	269.7045
77.11	270.3668
77.11	270.3668
86.48	208.5415
87.30	208.7104
87.30	208.7104
92.58	209.7779
98.44	193.7794
103.76	221.8509
105.31	199.5082
129.07	174.8743
143.76	203.5141
198.00	193.6476
209.25	177.3010
228.18	151.0594
238.63	172.9917
242.00	255.2261
269.46	119.8349
270.25	132.6679
277.36	134.7363
295.22	138.8001
300.09	126.4675
312.17	115.4288
338.32	119.7312
351.93	102.5084
387.59	70.6785
409.46	72.9737
427.87	84.0700
463.00	78.9057
510.77	54.8656
583.19	53.9636
609.31	50.0295
661.66	72.5344
727.33	43.9927
763.13	38.7261
768.36	34.9939
785.37	33.2405
794.95	26.6545
806.17	35.3176
831.80	31.6915
860.56	29.0033
896.60	28.2654
911.20	30.3125
934.06	23.5850
964.77	33.9153
968.97	48.5135
1001.03	22.5920
1078.86	23.1925
1120.29	33.2394
1155.19	21.1314
1173.23	22.9685
1238.11	25.0273
1280.96	15.7599
1332.51	21.1979
1377.67	23.4932
1401.50	15.0083
1407.98	16.0974
1460.80	12.9863
1509.23	16.8229
1588.20	21.5170
1620.50	14.2540
1729.60	13.5117
1764.49	17.4557

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701041

Total Uranium Activity	-2.6629E-02	ug/g
Total Uranium Counting Unc.	5.4915E-02	ug/g
Total Uranium Tpu	5.4915E-08	ug/g
Total Uranium Mda	4.4078E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 15:14:28.76

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701042.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:13:48
Sample ID         : G198701042           Sample quantity  : 1.02890E+02 GRAM
Detector name     : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00         Elapsed real time: 0 04:00:07.96  0.1%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708133               Detector SN#     :
Matrix Spike ID  :                       LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.21*	39	277	1.02	126.37	123	7	2.70E-03	82.7	
2	0	68.86	51	274	1.06	137.67	136	7	3.53E-03	55.4	
3	2	74.93*	164	242	0.98	149.81	144	21	1.14E-02	18.1	1.94E+00
4	2	77.11	304	197	0.90	154.16	144	21	2.11E-02	9.2	
5	2	80.86	31	227	1.00	161.67	144	21	2.14E-03	81.0	
6	8	84.51	139	330	1.78	168.98	165	13	9.63E-03	25.2	1.40E+00
7	8	87.26	188	249	1.19	174.47	165	13	1.31E-02	16.0	
8	5	90.06	114	139	0.92	180.08	178	15	7.93E-03	17.2	1.22E+00
9	5	92.79*	184	274	1.37	185.54	178	15	1.28E-02	20.2	
10	0	134.10	56	192	0.99	268.17	266	6	3.86E-03	41.5	
11	0	150.18	96	299	3.16	300.33	296	10	6.63E-03	35.3	
12	0	185.98*	81	349	1.02	371.94	367	10	5.61E-03	50.1	
13	0	206.24	53	150	1.41	412.47	410	6	3.68E-03	39.3	
14	0	209.70	78	240	0.99	419.39	416	9	5.45E-03	37.1	
15	0	217.19	60	181	1.61	434.37	431	8	4.19E-03	41.1	
16	4	238.70*	516	178	1.11	477.40	470	26	3.58E-02	7.1	1.95E+00
17	4	241.72	186	234	1.63	483.45	470	26	1.29E-02	17.9	
18	4	245.79	31	179	1.64	491.58	470	26	2.18E-03	78.5	
19	0	270.30	62	302	4.79	540.61	533	14	4.30E-03	61.1	
20	0	277.71	47	155	0.84	555.43	552	8	3.28E-03	47.8	
21	0	295.42	216	227	1.02	590.86	587	10	1.50E-02	14.7	
22	0	300.03	40	150	1.19	600.08	596	8	2.81E-03	55.2	
23	0	338.62	117	165	0.81	677.28	673	9	8.12E-03	21.9	
24	0	342.78	24	95	1.45	685.60	684	6	1.63E-03	68.6	
25	0	351.91*	394	210	1.12	703.87	698	12	2.74E-02	9.5	
26	0	447.17	26	123	0.66	894.44	888	10	1.78E-03	83.9	
27	0	511.35*	67	172	2.30	1022.83	1016	19	4.64E-03	62.2	
28	0	569.79*	9	90	1.22	1139.75	1135	11	6.54E-04	340.6	
29	0	583.24*	137	111	1.19	1166.64	1160	13	9.51E-03	19.6	
30	0	609.29*	267	120	1.14	1218.76	1214	12	1.86E-02	10.9	
31	0	621.18	40	229	10.79	1242.56	1226	28	2.79E-03	108.1	
32	0	661.53	154	140	1.31	1323.29	1318	14	1.07E-02	18.1	
33	0	714.80	23	49	1.06	1429.87	1424	9	1.61E-03	58.2	
34	0	727.51	36	68	2.03	1455.29	1450	11	2.48E-03	47.9	
35	0	734.57	25	76	0.93	1469.41	1464	12	1.72E-03	73.7	
36	0	829.75	26	99	6.11	1659.85	1646	18	1.82E-03	84.4	
37	0	865.59	18	40	1.82	1731.56	1724	10	1.28E-03	68.4	
38	0	883.78	15	59	3.16	1767.97	1756	13	1.01E-03	111.9	

Sample ID : G198701042 Acquisition date : 17-DEC-2007 11:13:48

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	911.15*	119	76	2.27	1822.73	1814	16	8.25E-03	19.7	
40	3	965.42	29	73	2.41	1931.32	1924	19	2.02E-03	64.6	1.15E+00
41	3	969.09	49	43	1.54	1938.67	1924	19	3.43E-03	28.7	
42	0	1072.68	12	43	1.68	2145.95	2137	16	7.99E-04	127.4	
43	0	1093.55	17	16	1.60	2187.71	2183	9	1.19E-03	48.3	
44	2	1120.29*	58	19	2.08	2241.21	2235	18	4.05E-03	23.3	1.52E+00
45	2	1124.31	24	9	2.32	2249.25	2235	18	1.65E-03	29.8	
46	0	1237.84	58	12	1.58	2476.44	2468	16	4.06E-03	18.6	
47	0	1267.17	20	22	0.72	2535.14	2530	12	1.41E-03	50.4	
48	0	1281.70	8	43	1.41	2564.21	2560	14	5.22E-04	187.4	
49	0	1315.65	9	18	1.71	2632.15	2625	11	6.37E-04	102.0	
50	0	1378.03	17	28	0.87	2757.00	2748	14	1.18E-03	70.3	
51	0	1460.49*	247	7	1.41	2922.01	2914	14	1.72E-02	7.3	
52	0	1569.81	11	6	1.87	3140.81	3133	11	7.29E-04	53.1	
53	0	1607.79	14	3	4.10	3216.83	3211	12	9.64E-04	36.7	
54	0	1685.73	5	7	1.26	3372.82	3367	9	3.36E-04	107.9	
55	0	1731.37	17	7	0.70	3464.18	3455	15	1.16E-03	43.1	
56	0	1737.28	11	0	0.83	3476.00	3471	10	7.64E-04	30.2	
57	0	1764.65	48	12	2.19	3530.79	3525	12	3.33E-03	20.4	
58	0	1770.23*	4	25	1.89	3541.96	3537	12	2.64E-04	334.6	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701042       *
* Acquisition date : 17-DEC-2007 11:13:48 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:07.96     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701042           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0289E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.082E+00	6.471E-01	2.907E-01	0.000E+00
CS-137	1.576E-01	5.654E-02	3.711E-02	0.000E+00
TL-208	1.263E-01	4.908E-02	3.842E-02	0.000E+00
BI-212	2.856E-01	2.687E-01	3.389E-01	0.000E+00
PB-212	4.560E-01	6.808E-02	5.841E-02	0.000E+00
BI-214	4.688E-01	1.040E-01	8.505E-02	0.000E+00
PB-214	5.418E-01	1.050E-01	7.361E-02	0.000E+00
RA-223	1.898E-01	2.277E-01	1.789E-01	0.000E+00
AC-228	5.319E-01	2.092E-01	1.567E-01	0.000E+00
TH-234	1.080E+00	4.353E-01	3.940E-01	0.000E+00
NP-237	5.153E-01	1.658E-01	1.664E-01	0.000E+00
AM-243	1.055E-01	3.812E-02	4.441E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-2.249E-03		2.127E-02	3.517E-02	0.000E+00	NOT IDENT.
RH-101	-2.602E-03		2.240E-02	3.416E-02	0.000E+00	NOT IDENT.
SB-125	-1.705E-02		6.445E-02	1.057E-01	0.000E+00	NOT IDENT.
EU-155	2.298E-02		5.624E-02	9.920E-02	0.000E+00	NOT IDENT.
PO-209	1.472E+00		5.699E+00	8.771E+00	0.000E+00	NOT IDENT.
BI-211	-3.558E-01		8.658E-01	1.177E+00	0.000E+00	NOT IDENT.
PA-233	3.961E-03		3.936E-02	6.785E-02	0.000E+00	NOT IDENT.
PA-234M	-2.204E+00		3.444E+00	4.969E+00	0.000E+00	NOT IDENT.
U-235	7.153E-02		1.170E-01	1.890E-01	0.000E+00	NOT IDENT.
NP-236	7.352E-03		3.760E-02	5.731E-02	0.000E+00	NOT IDENT.
NP-239	6.792E-02		1.359E-01	2.284E-01	0.000E+00	NOT IDENT.
AM-241	4.196E-02		1.047E-01	1.609E-01	0.000E+00	NOT IDENT.
CM-243	3.358E-02		4.929E-02	8.799E-02	0.000E+00	NOT IDENT.
AM-246	3.099E-02		9.288E-02	1.424E-01	0.000E+00	NOT IDENT.
CF-249	1.856E-02		2.640E-02	4.626E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 15:14:29.77

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701042.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:13:48
Sample ID        : G198701042           Sample quantity  : 1.02890E+02 GRAM
Detector name    : GAM23                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:07.96  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	247	10.66*	1.037E+00	4.082E+00	4.082E+00	16.18
CS-137	661.66	154	85.10*	2.102E+00	1.568E-01	1.576E-01	36.62
TL-208	277.36	47	6.31	4.249E+00	3.217E-01	3.217E-01	95.70
	510.77	67	22.60	2.612E+00	2.064E-01	2.064E-01	124.42
	583.19	137	84.50*	2.341E+00	1.263E-01	1.263E-01	39.67
	763.13	------	1.81	1.854E+00	------	Line Not Found	------
	860.56	------	12.42	1.664E+00	------	Line Not Found	------
BI-212	727.33	36	11.80*	1.935E+00	2.856E-01	2.856E-01	96.00
	785.37	------	1.10	1.807E+00	------	Line Not Found	------
	1620.50	------	1.49	9.597E-01	------	Line Not Found	------
PB-212	74.81	164	10.40	4.162E+00	6.916E-01	6.916E-01	36.89
	77.11	304	17.50	4.412E+00	7.173E-01	7.173E-01	19.72
	87.30	188	7.81	5.374E+00	8.181E-01	8.181E-01	32.83
	238.63	516	43.30*	4.766E+00	4.560E-01	4.560E-01	15.24
	300.09	40	3.28	4.002E+00	5.623E-01	5.623E-01	110.47
BI-214	609.31	267	46.10*	2.256E+00	4.687E-01	4.688E-01	22.63
	768.36	------	4.94	1.843E+00	------	Line Not Found	------
	806.17	------	1.22	1.765E+00	------	Line Not Found	------
	934.06	------	3.03	1.544E+00	------	Line Not Found	------
	1120.29	58	15.10	1.306E+00	5.390E-01	5.391E-01	47.04
	1155.19	------	1.63	1.270E+00	------	Line Not Found	------
	1238.11	58	5.79	1.194E+00	1.542E+00	1.542E+00	37.73
	1280.96	8	1.43	1.157E+00	8.277E-01	8.277E-01	374.80
	1377.67	17	4.00	1.088E+00	7.127E-01	7.128E-01	140.87
	1401.50	------	1.27	1.073E+00	------	Line Not Found	------
	1407.98	------	2.15	1.069E+00	------	Line Not Found	------
	1509.23	------	2.11	1.011E+00	------	Line Not Found	------
	1729.60	17	2.92	9.190E-01	1.139E+00	1.139E+00	86.44
	1764.49	48	15.40	9.087E-01	6.255E-01	6.256E-01	41.31
PB-214	74.81	164	6.44	4.162E+00	1.117E+00	1.117E+00	36.89
	77.11	304	10.80	4.412E+00	1.162E+00	1.162E+00	19.72
	87.30	188	4.84	5.374E+00	1.320E+00	1.320E+00	32.83

Sample ID : G198701042 Acquisition date : 17-DEC-2007 11:13:48

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	186	7.43	4.721E+00	9.652E-01	9.653E-01	36.26
	295.22	216	19.30	4.050E+00	5.039E-01	5.039E-01	30.05
	351.93	394	37.60*	3.529E+00	5.418E-01	5.418E-01	19.78
RA-223	269.46	62	13.70*	4.339E+00	1.898E-01	1.898E-01	122.39
AC-228	129.07	------	2.42	6.529E+00	------	Line Not Found	------
	209.25	78	3.89	5.229E+00	7.038E-01	7.038E-01	74.47
	270.25	62	3.46	4.339E+00	7.517E-01	7.517E-01	122.39
	338.32	117	11.27	3.638E+00	5.200E-01	5.200E-01	44.19
	409.46	------	1.92	3.128E+00	------	Line Not Found	------
	463.00	------	4.40	2.833E+00	------	Line Not Found	------
	794.95	------	4.25	1.788E+00	------	Line Not Found	------
	911.20	119	25.80*	1.579E+00	5.319E-01	5.319E-01	40.13
	964.77	29	4.99	1.497E+00	7.094E-01	7.094E-01	129.36
	968.97	49	15.80	1.492E+00	3.820E-01	3.820E-01	57.83
	1588.20	------	3.22	9.734E-01	------	Line Not Found	------
TH-234	63.29	39	4.80	2.615E+00	5.645E-01	5.645E-01	165.65
	92.58	184	5.41*	5.757E+00	1.080E+00	1.080E+00	41.13
NP-237	86.48	188	12.40*	5.374E+00	5.153E-01	5.153E-01	32.83
AM-243	74.66	164	68.20*	4.162E+00	1.055E-01	1.055E-01	36.89

Flag: "*" = Keyline

Sample ID : G198701042 Acquisition date : 17-DEC-2007 11:13:48

Total number of lines in spectrum 58
Number of unidentified lines 29
Number of lines tentatively identified by NID 29 50.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.082E+00	4.082E+00	0.660E+00	16.18	
CS-137	9.47E+08S	1.01	1.568E-01	1.576E-01	0.577E-01	36.62	
TL-208	4.43E+17S	1.00	1.263E-01	1.263E-01	0.501E-01	39.67	
BI-212	4.43E+17S	1.00	2.856E-01	2.856E-01	2.742E-01	96.00	
PB-212	4.43E+17S	1.00	4.560E-01	4.560E-01	0.695E-01	15.24	
BI-214	5.05E+10S	1.00	4.687E-01	4.688E-01	1.061E-01	22.63	
PB-214	5.05E+10S	1.00	5.418E-01	5.418E-01	1.072E-01	19.78	
RA-223	1.04E+12S	1.00	1.898E-01	1.898E-01	2.324E-01	122.39	
AC-228	4.43E+17S	1.00	5.319E-01	5.319E-01	2.134E-01	40.13	
TH-234	1.41E+17S	1.00	1.080E+00	1.080E+00	0.444E+00	41.13	
NP-237	6.75E+13S	1.00	5.153E-01	5.153E-01	1.692E-01	32.83	
AM-243	2.33E+11S	1.00	1.055E-01	1.055E-01	0.389E-01	36.89	
			---	---			
		Total Activity :	8.540E+00	8.540E+00			
		Grand Total Activity :	8.540E+00	8.540E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701042 Acquisition date : 17-DEC-2007 11:13:48

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	68.86	51	274	1.06	137.67	136	7	3.53E-03	****	3.39E+00	
2	80.86	31	227	1.00	161.67	144	21	2.14E-03	****	4.81E+00	
8	84.51	139	330	1.78	168.98	165	13	9.63E-03	50.4	5.15E+00	
5	90.06	114	139	0.92	180.08	178	15	7.93E-03	34.4	5.58E+00	
0	134.10	56	192	0.99	268.17	266	6	3.86E-03	82.9	6.50E+00	
0	150.18	96	299	3.16	300.33	296	10	6.63E-03	70.7	6.30E+00	
0	185.98	81	349	1.02	371.94	367	10	5.61E-03	****	5.65E+00	
0	206.24	53	150	1.41	412.47	410	6	3.68E-03	78.6	5.29E+00	
0	217.19	60	181	1.61	434.37	431	8	4.19E-03	82.1	5.10E+00	
4	245.79	31	179	1.64	491.58	470	26	2.18E-03	****	4.66E+00	
0	342.78	24	95	1.45	685.60	684	6	1.63E-03	****	3.60E+00	
0	447.17	26	123	0.66	894.44	888	10	1.78E-03	****	2.91E+00	
0	569.79	9	90	1.22	1139.75	1135	11	6.54E-04	****	2.39E+00	
0	621.18	40	229	10.79	1242.56	1226	28	2.79E-03	****	2.22E+00	
0	714.80	23	49	1.06	1429.87	1424	9	1.61E-03	****	1.96E+00	
0	734.57	25	76	0.93	1469.41	1464	12	1.72E-03	****	1.92E+00	
0	829.75	26	99	6.11	1659.85	1646	18	1.82E-03	****	1.72E+00	
0	865.59	18	40	1.82	1731.56	1724	10	1.28E-03	****	1.66E+00	
0	883.78	15	59	3.16	1767.97	1756	13	1.01E-03	****	1.62E+00	
0	1072.68	12	43	1.68	2145.95	2137	16	7.99E-04	****	1.36E+00	
0	1093.55	17	16	1.60	2187.71	2183	9	1.19E-03	96.6	1.34E+00	
2	1124.31	24	9	2.32	2249.25	2235	18	1.65E-03	59.5	1.30E+00	
0	1267.17	20	22	0.72	2535.14	2530	12	1.41E-03	****	1.17E+00	
0	1315.65	9	18	1.71	2632.15	2625	11	6.37E-04	****	1.13E+00	
0	1569.81	11	6	1.87	3140.81	3133	11	7.29E-04	****	9.82E-01	
0	1607.79	14	3	4.10	3216.83	3211	12	9.64E-04	73.5	9.65E-01	
0	1685.73	5	7	1.26	3372.82	3367	9	3.36E-04	****	9.35E-01	
0	1737.28	11	0	0.83	3476.00	3471	10	7.64E-04	60.3	9.17E-01	
0	1770.23	4	25	1.89	3541.96	3537	12	2.64E-04	****	9.07E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701042            *
* Acquisition date : 17-DEC-2007 11:13:48 Detector SN#    :                 *
* Detector ID      : GAM23                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:07.96     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701042           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0289E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 18-MAY-2007 16:30:26 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.082E+00	6.471E-01	1.454E-01	6.471E-01
CS-137	1.576E-01	5.654E-02	1.857E-02	5.654E-02
TL-208	1.263E-01	4.908E-02	1.922E-02	4.908E-02
BI-212	2.856E-01	2.687E-01	1.696E-01	2.687E-01
PB-212	4.560E-01	6.808E-02	2.922E-02	6.808E-02
BI-214	4.688E-01	1.040E-01	4.255E-02	1.040E-01
PB-214	5.418E-01	1.050E-01	3.683E-02	1.050E-01
RA-223	1.898E-01	2.277E-01	8.948E-02	2.277E-01
AC-228	5.319E-01	2.092E-01	7.837E-02	2.092E-01
TH-234	1.080E+00	4.353E-01	1.971E-01	4.353E-01
NP-237	5.153E-01	1.658E-01	8.323E-02	1.658E-01
AM-243	1.055E-01	3.812E-02	2.222E-02	3.812E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-2.249E-03	2.127E-02	1.759E-02	2.127E-02	NOT IDENT.
RH-101	-2.602E-03	2.240E-02	1.709E-02	2.240E-02	NOT IDENT.
SB-125	-1.705E-02	6.445E-02	5.289E-02	6.445E-02	NOT IDENT.
EU-155	2.298E-02	5.624E-02	4.963E-02	5.624E-02	NOT IDENT.
PO-209	1.472E+00	5.699E+00	4.388E+00	5.699E+00	NOT IDENT.
BI-211	-3.558E-01	8.658E-01	5.887E-01	8.658E-01	NOT IDENT.
PA-233	3.961E-03	3.936E-02	3.395E-02	3.936E-02	NOT IDENT.
PA-234M	-2.204E+00	3.444E+00	2.486E+00	3.444E+00	NOT IDENT.
U-235	7.153E-02	1.170E-01	9.456E-02	1.170E-01	NOT IDENT.
NP-236	7.352E-03	3.760E-02	2.867E-02	3.760E-02	NOT IDENT.
NP-239	6.792E-02	1.359E-01	1.143E-01	1.359E-01	NOT IDENT.
AM-241	4.196E-02	1.047E-01	8.050E-02	1.047E-01	NOT IDENT.
CM-243	3.358E-02	4.929E-02	4.402E-02	4.929E-02	NOT IDENT.
AM-246	3.099E-02	9.288E-02	7.126E-02	9.288E-02	NOT IDENT.
CF-249	1.856E-02	2.640E-02	2.314E-02	2.640E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	185.6007
63.29	185.4586
74.66	215.7710
74.81	215.8742
74.81	215.8742
77.11	217.4440
77.11	217.4440
86.48	165.8228
87.30	166.2105
87.30	166.2105
92.58	207.0001
98.44	205.0545
103.76	192.9398
105.31	212.1707
129.07	212.8187
143.76	199.1323
198.00	213.1702
209.25	147.3381
228.18	184.1602
238.63	202.2802
242.00	203.1615
269.46	158.1721
270.25	158.3199
277.36	167.7861
295.22	179.7315
300.09	121.8887
312.17	140.7053
338.32	142.9077
351.93	133.1395
387.59	117.0300
409.46	138.1028
427.87	121.0309
463.00	117.1140
510.77	100.8238
583.19	80.9539
609.31	109.6553
661.66	61.2009
727.33	84.0811
763.13	80.3850
768.36	69.6445
785.37	64.1969
794.95	62.4738
806.17	82.0481
831.80	73.4513
860.56	55.3672
896.60	43.2292
911.20	57.2867
934.06	63.1844
964.77	53.1284
968.97	57.9232
1001.03	52.7859
1078.86	33.9595
1120.29	37.3322
1155.19	33.9063
1173.23	27.2902
1238.11	37.8268
1280.96	22.4843
1332.51	29.7186
1377.67	28.4833
1401.50	26.1393
1407.98	27.2357
1460.80	14.5787
1509.23	28.0027
1588.20	24.5010
1620.50	19.0011
1729.60	5.1213
1764.49	57.0412

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701042

Total Uranium Activity	3.3099E-02	ug/g
Total Uranium Counting Unc.	5.4136E-02	ug/g
Total Uranium Tpu	5.4136E-08	ug/g
Total Uranium Mda	4.3754E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 14:24:45.06

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701043.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:24:10
Sample ID        : G198701043           Sample quantity  : 1.43420E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:04.24  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.47*	13	381	0.93	93.44	90	9	1.19E-03	304.3	
2	0	53.32*	30	326	1.32	107.12	103	8	2.76E-03	111.0	
3	0	63.59*	67	436	0.81	127.64	124	8	6.20E-03	62.8	
4	1	74.87*	466	357	0.97	150.18	144	14	4.32E-02	8.2	2.22E+00
5	1	77.19*	691	275	0.86	154.82	144	14	6.40E-02	5.5	
6	3	84.12*	67	360	1.09	168.66	162	32	6.21E-03	50.2	1.51E+00
7	3	87.24*	259	347	1.22	174.90	162	32	2.39E-02	13.6	
8	3	90.00*	145	287	1.05	180.40	162	32	1.35E-02	21.2	
9	3	92.78*	188	316	1.16	185.97	162	32	1.74E-02	21.2	
10	0	105.12*	38	302	2.24	210.62	207	8	3.49E-03	84.7	
11	0	128.93	94	358	1.26	258.20	254	9	8.69E-03	37.7	
12	0	140.57	33	307	1.79	281.47	276	8	3.03E-03	94.8	
13	0	143.73*	17	370	2.57	287.78	285	9	1.60E-03	209.3	
14	0	185.75*	200	314	1.05	371.73	366	11	1.86E-02	20.1	
15	0	209.15	116	235	1.43	418.51	414	9	1.07E-02	25.6	
16	6	238.73*	942	141	0.95	477.61	474	17	8.72E-02	4.0	4.14E+00
17	6	241.79	287	196	1.99	483.73	474	17	2.66E-02	15.1	
18	0	270.15	70	232	1.71	540.40	535	11	6.48E-03	43.8	
19	0	277.54	45	136	0.95	555.16	552	7	4.12E-03	45.9	
20	2	295.32*	304	119	0.98	590.71	583	22	2.82E-02	8.5	1.65E+00
21	2	300.13	91	141	1.43	600.31	583	22	8.39E-03	27.4	
22	0	307.92	16	194	3.36	615.88	611	11	1.51E-03	167.4	
23	0	319.53	11	132	1.01	639.08	634	8	1.06E-03	176.8	
24	0	328.06	36	125	1.07	656.13	653	7	3.31E-03	54.4	
25	0	338.40*	179	158	0.84	676.79	673	9	1.66E-02	15.0	
26	0	351.97*	525	181	1.04	703.90	698	11	4.86E-02	6.8	
27	0	463.71	75	121	1.36	927.21	922	12	6.97E-03	32.1	
28	0	511.49*	130	113	1.99	1022.72	1016	18	1.21E-02	25.6	
29	0	558.81	23	62	0.78	1117.29	1112	10	2.10E-03	68.4	
30	0	583.32*	320	44	1.26	1166.27	1162	10	2.96E-02	7.2	
31	0	594.05	14	70	1.52	1187.72	1184	9	1.34E-03	106.1	
32	0	609.50*	439	83	1.44	1218.59	1213	14	4.06E-02	6.7	
33	0	620.46	30	32	1.93	1240.50	1238	6	2.80E-03	34.6	
34	0	653.67	23	28	0.94	1306.88	1304	6	2.11E-03	42.6	
35	0	665.03	70	132	6.02	1329.59	1319	20	6.48E-03	42.3	
36	0	727.52*	72	50	1.47	1454.47	1449	11	6.70E-03	24.2	
37	0	745.62	26	23	0.95	1490.66	1488	6	2.42E-03	35.3	
38	0	767.91	61	40	1.63	1535.21	1530	10	5.65E-03	23.2	

Sample ID : G198701043 Acquisition date : 17-DEC-2007 11:24:10

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	795.46	32	42	2.07	1590.28	1585	11	2.98E-03	42.5	
40	1	835.50	22	40	1.73	1670.32	1667	21	1.99E-03	45.6	3.18E+00
41	1	840.30	32	44	1.74	1679.91	1667	21	2.99E-03	43.3	
42	0	860.62	45	50	1.64	1720.53	1714	14	4.17E-03	36.2	
43	0	868.94	13	35	2.88	1737.15	1731	8	1.21E-03	83.7	
44	0	905.84	25	38	0.75	1810.91	1806	11	2.33E-03	51.6	
45	0	911.30*	186	43	1.30	1821.83	1817	12	1.72E-02	10.8	
46	3	964.64	38	46	2.11	1928.46	1922	29	3.48E-03	41.3	2.23E+00
47	3	969.13	96	42	2.02	1937.44	1922	29	8.85E-03	17.3	
48	0	1011.79	63	79	9.25	2022.71	2006	35	5.81E-03	45.9	
49	0	1039.59	12	13	1.23	2078.27	2075	6	1.09E-03	57.0	
50	0	1120.48*	83	45	1.82	2240.00	2232	15	7.68E-03	21.4	
51	0	1233.72	15	25	0.95	2466.38	2460	9	1.37E-03	67.8	
52	0	1280.43	41	15	2.97	2559.76	2552	15	3.80E-03	25.8	
53	0	1287.30	14	19	0.53	2573.50	2567	11	1.30E-03	66.0	
54	0	1349.11	11	7	1.40	2697.08	2693	8	9.93E-04	54.4	
55	0	1389.76	15	7	0.99	2778.35	2773	10	1.36E-03	43.5	
56	0	1407.17	21	18	4.29	2813.15	2806	14	1.94E-03	47.7	
57	0	1435.48	22	5	2.90	2869.77	2865	10	2.04E-03	28.6	
58	0	1460.86*	273	47	1.57	2920.51	2912	17	2.53E-02	8.5	
59	0	1484.18	12	5	1.60	2967.14	2963	7	1.12E-03	42.1	
60	0	1588.54	8	23	2.03	3175.81	3171	11	7.57E-04	117.0	
61	0	1677.33	14	3	3.24	3353.35	3348	11	1.30E-03	35.3	
62	0	1764.87*	76	8	1.90	3528.40	3521	15	7.05E-03	14.2	
63	0	1847.69	21	4	1.33	3694.01	3687	14	1.99E-03	28.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701043       *
* Acquisition date : 17-DEC-2007 11:24:10 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:04.24     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701043           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4342E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.016E+00	8.778E-01	4.787E-01	0.000E+00
EU-155	4.700E-02	7.808E-02	9.563E-02	0.000E+00
TL-208	3.277E-01	5.150E-02	3.767E-02	0.000E+00
BI-212	6.529E-01	3.135E-01	3.410E-01	0.000E+00
PB-212	8.584E-01	9.526E-02	5.739E-02	0.000E+00
BI-214	8.596E-01	1.279E-01	8.031E-02	0.000E+00
PB-214	7.591E-01	1.125E-01	7.955E-02	0.000E+00
RA-223	2.219E-01	1.910E-01	1.842E-01	0.000E+00
AC-228	9.432E-01	2.095E-01	1.461E-01	0.000E+00
TH-234	8.701E-01	3.672E-01	3.919E-01	0.000E+00
U-235	4.530E-02	1.859E-01	2.038E-01	0.000E+00
NP-237	5.173E-01	1.418E-01	1.687E-01	0.000E+00
AM-243	1.683E-01	2.900E-02	3.356E-02	0.000E+00
CM-243	4.224E-02	7.017E-02	8.745E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	2.043E-02		2.933E-02	5.282E-02	0.000E+00	NOT IDENT.
RH-101	-2.755E-03		2.229E-02	3.624E-02	0.000E+00	NOT IDENT.
SB-125	8.760E-03		5.893E-02	1.039E-01	0.000E+00	NOT IDENT.
CS-137	5.043E-03		3.639E-02	5.322E-02	0.000E+00	NOT IDENT.
PO-209	2.776E+00		5.000E+00	9.063E+00	0.000E+00	NOT IDENT.
BI-211	-1.730E-01		8.496E-01	1.244E+00	0.000E+00	NOT IDENT.
PA-233	-2.415E-02		4.495E-02	6.799E-02	0.000E+00	NOT IDENT.
PA-234M	-2.387E-02		3.567E+00	5.246E+00	0.000E+00	NOT IDENT.
NP-236	2.549E-02		3.386E-02	5.554E-02	0.000E+00	NOT IDENT.
NP-239	-2.488E-02		1.283E-01	2.169E-01	0.000E+00	NOT IDENT.
AM-241	-7.079E-03		3.470E-02	5.797E-02	0.000E+00	NOT IDENT.
AM-246	2.452E-02		9.655E-02	1.674E-01	0.000E+00	NOT IDENT.
CF-249	3.166E-03		2.540E-02	4.505E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 14:24:46.03

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701043.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 11:24:10
Sample ID        : G198701043           Sample quantity  : 1.43420E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:04.24  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	273	10.66*	8.924E-01	5.016E+00	5.016E+00	17.86
EU-155	105.31	38	21.20*	6.799E+00	4.558E-02	4.700E-02	169.52
TL-208	277.36	45	6.31	3.930E+00	3.131E-01	3.131E-01	92.08
	510.77	130	22.60	2.279E+00	4.418E-01	4.418E-01	51.54
	583.19	320	84.50*	2.015E+00	3.277E-01	3.277E-01	16.04
	763.13	------	1.81	1.568E+00	------	Line Not Found	------
	860.56	45	12.42	1.404E+00	4.507E-01	4.507E-01	72.80
BI-212	727.33	72	11.80*	1.638E+00	6.529E-01	6.529E-01	49.00
	785.37	------	1.10	1.527E+00	------	Line Not Found	------
	1620.50	------	1.49	8.223E-01	------	Line Not Found	------
PB-212	74.81	466	10.40	7.088E+00	1.104E+00	1.104E+00	17.58
	77.11	691	17.50	7.087E+00	9.728E-01	9.728E-01	12.78
	87.30	259	7.81	7.033E+00	8.213E-01	8.213E-01	27.97
	238.63	942	43.30*	4.423E+00	8.584E-01	8.584E-01	11.32
	300.09	91	3.28	3.684E+00	1.308E+00	1.308E+00	55.22
BI-214	609.31	439	46.10*	1.933E+00	8.595E-01	8.596E-01	15.18
	768.36	61	4.94	1.559E+00	1.384E+00	1.384E+00	47.00
	806.17	------	1.22	1.490E+00	------	Line Not Found	------
	934.06	------	3.03	1.304E+00	------	Line Not Found	------
	1120.29	83	15.10	1.112E+00	8.616E-01	8.617E-01	43.19
	1155.19	------	1.63	1.083E+00	------	Line Not Found	------
	1238.11	------	5.79	1.022E+00	------	Line Not Found	------
	1280.96	41	1.43	9.936E-01	5.035E+00	5.035E+00	51.97
	1377.67	------	4.00	9.356E-01	------	Line Not Found	------
	1401.50	------	1.27	9.227E-01	------	Line Not Found	------
	1407.98	21	2.15	9.197E-01	1.853E+00	1.853E+00	95.51
	1509.23	------	2.11	8.695E-01	------	Line Not Found	------
	1729.60	------	2.92	7.820E-01	------	Line Not Found	------
	1764.49	76	15.40	7.700E-01	1.120E+00	1.120E+00	29.00
PB-214	74.81	466	6.44	7.088E+00	1.783E+00	1.783E+00	17.58
	77.11	691	10.80	7.087E+00	1.576E+00	1.576E+00	12.78
	87.30	259	4.84	7.033E+00	1.325E+00	1.325E+00	27.97

Sample ID : G198701043 Acquisition date : 17-DEC-2007 11:24:10

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	287	7.43	4.380E+00	1.541E+00	1.541E+00	31.28
	295.22	304	19.30	3.734E+00	7.368E-01	7.368E-01	18.59
	351.93	525	37.60*	3.210E+00	7.590E-01	7.591E-01	15.12
RA-223	269.46	70	13.70*	4.017E+00	2.219E-01	2.219E-01	87.86
AC-228	129.07	94	2.42	6.360E+00	1.064E+00	1.064E+00	76.02
	209.25	116	3.89	4.867E+00	1.068E+00	1.068E+00	51.75
	270.25	70	3.46	4.017E+00	8.784E-01	8.784E-01	87.86
	338.32	179	11.27	3.323E+00	8.342E-01	8.342E-01	30.71
	409.46	------	1.92	2.802E+00	------ Line Not Found		------
	463.00	75	4.40	2.498E+00	1.196E+00	1.196E+00	64.42
	794.95	32	4.25	1.509E+00	8.757E-01	8.757E-01	85.39
	911.20	186	25.80*	1.334E+00	9.432E-01	9.432E-01	22.66
	964.77	38	4.99	1.268E+00	1.036E+00	1.036E+00	82.93
	968.97	96	15.80	1.262E+00	8.365E-01	8.365E-01	35.31
	1588.20	8	3.22	8.351E-01	5.306E-01	5.306E-01	234.02
TH-234	63.29	67	4.80	7.005E+00	3.476E-01	3.476E-01	125.85
	92.58	188	5.41*	6.975E+00	8.701E-01	8.701E-01	43.07
U-235	143.76	17	10.96*	6.065E+00	4.530E-02	4.530E-02	418.69
NP-237	86.48	259	12.40*	7.033E+00	5.173E-01	5.173E-01	27.97
AM-243	74.66	466	68.20*	7.088E+00	1.683E-01	1.683E-01	17.58
CM-243	103.76	38	23.00*	6.799E+00	4.201E-02	4.224E-02	169.52

Flag: "*" = Keyline

Sample ID : G198701043 Acquisition date : 17-DEC-2007 11:24:10

Total number of lines in spectrum 63
Number of unidentified lines 29
Number of lines tentatively identified by NID 34 53.97%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.016E+00	5.016E+00	0.896E+00	17.86	
EU-155	1.57E+08S	1.03	4.558E-02	4.700E-02	7.967E-02	169.52	
TL-208	4.43E+17S	1.00	3.277E-01	3.277E-01	0.525E-01	16.04	
BI-212	4.43E+17S	1.00	6.529E-01	6.529E-01	3.199E-01	49.00	
PB-212	4.43E+17S	1.00	8.584E-01	8.584E-01	0.972E-01	11.32	
BI-214	5.05E+10S	1.00	8.595E-01	8.596E-01	1.305E-01	15.18	
PB-214	5.05E+10S	1.00	7.590E-01	7.591E-01	1.148E-01	15.12	
RA-223	1.04E+12S	1.00	2.219E-01	2.219E-01	1.949E-01	87.86	
AC-228	4.43E+17S	1.00	9.432E-01	9.432E-01	2.138E-01	22.66	
TH-234	1.41E+17S	1.00	8.701E-01	8.701E-01	3.747E-01	43.07	
U-235	2.22E+16S	1.00	4.530E-02	4.530E-02	18.96E-02	418.69	
NP-237	6.75E+13S	1.00	5.173E-01	5.173E-01	1.447E-01	27.97	
AM-243	2.33E+11S	1.00	1.683E-01	1.683E-01	0.296E-01	17.58	
CM-243	8.99E+08S	1.01	4.201E-02	4.224E-02	7.160E-02	169.52	
			---	---			
	Total Activity :		1.133E+01	1.133E+01			

Grand Total Activity : 1.133E+01 1.133E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701043 Acquisition date : 17-DEC-2007 11:24:10

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.47	13	381	0.93	93.44	90	9	1.19E-03	****	6.47E+00	
0	53.32	30	326	1.32	107.12	103	8	2.76E-03	****	6.76E+00	
3	84.12	67	360	1.09	168.66	162	32	6.21E-03	****	7.06E+00	
3	90.00	145	287	1.05	180.40	162	32	1.35E-02	42.5	7.01E+00	
0	140.57	33	307	1.79	281.47	276	8	3.03E-03	****	6.13E+00	
0	185.75	200	314	1.05	371.73	366	11	1.86E-02	40.1	5.26E+00	
0	307.92	16	194	3.36	615.88	611	11	1.51E-03	****	3.60E+00	
0	319.53	11	132	1.01	639.08	634	8	1.06E-03	****	3.49E+00	
0	328.06	36	125	1.07	656.13	653	7	3.31E-03	****	3.41E+00	
0	558.81	23	62	0.78	1117.29	1112	10	2.10E-03	****	2.10E+00	
0	594.05	14	70	1.52	1187.72	1184	9	1.34E-03	****	1.98E+00	
0	620.46	30	32	1.93	1240.50	1238	6	2.80E-03	69.1	1.90E+00	
0	653.67	23	28	0.94	1306.88	1304	6	2.11E-03	85.1	1.81E+00	
0	665.03	70	132	6.02	1329.59	1319	20	6.48E-03	84.6	1.78E+00	
0	745.62	26	23	0.95	1490.66	1488	6	2.42E-03	70.6	1.60E+00	
1	835.50	22	40	1.73	1670.32	1667	21	1.99E-03	91.1	1.44E+00	
1	840.30	32	44	1.74	1679.91	1667	21	2.99E-03	86.6	1.44E+00	
0	868.94	13	35	2.88	1737.15	1731	8	1.21E-03	****	1.39E+00	
0	905.84	25	38	0.75	1810.91	1806	11	2.33E-03	****	1.34E+00	
0	1011.79	63	79	9.25	2022.71	2006	35	5.81E-03	91.8	1.22E+00	
0	1039.59	12	13	1.23	2078.27	2075	6	1.09E-03	****	1.19E+00	
0	1233.72	15	25	0.95	2466.38	2460	9	1.37E-03	****	1.02E+00	
0	1287.30	14	19	0.53	2573.50	2567	11	1.30E-03	****	9.89E-01	
0	1349.11	11	7	1.40	2697.08	2693	8	9.93E-04	****	9.52E-01	
0	1389.76	15	7	0.99	2778.35	2773	10	1.36E-03	87.0	9.29E-01	
0	1435.48	22	5	2.90	2869.77	2865	10	2.04E-03	57.1	9.05E-01	
0	1484.18	12	5	1.60	2967.14	2963	7	1.12E-03	84.3	8.81E-01	
0	1677.33	14	3	3.24	3353.35	3348	11	1.30E-03	70.7	8.01E-01	
0	1847.69	21	4	1.33	3694.01	3687	14	1.99E-03	56.9	7.44E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701043            *
* Acquisition date : 17-DEC-2007 11:24:10 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:04.24     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701043           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4342E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.016E+00	8.778E-01	2.395E-01	8.778E-01
EU-155	4.700E-02	7.808E-02	4.785E-02	7.808E-02
TL-208	3.277E-01	5.150E-02	1.885E-02	5.150E-02
BI-212	6.529E-01	3.135E-01	1.706E-01	3.135E-01
PB-212	8.584E-01	9.526E-02	2.871E-02	9.526E-02
BI-214	8.596E-01	1.279E-01	4.018E-02	1.279E-01
PB-214	7.591E-01	1.125E-01	3.980E-02	1.125E-01
RA-223	2.219E-01	1.910E-01	9.214E-02	1.910E-01
AC-228	9.432E-01	2.095E-01	7.310E-02	2.095E-01
TH-234	8.701E-01	3.672E-01	1.961E-01	3.672E-01
U-235	4.530E-02	1.859E-01	1.020E-01	1.859E-01
NP-237	5.173E-01	1.418E-01	8.440E-02	1.418E-01
AM-243	1.683E-01	2.900E-02	1.679E-02	2.900E-02
CM-243	4.224E-02	7.017E-02	4.375E-02	7.017E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.043E-02	2.933E-02	2.642E-02	2.933E-02	NOT IDENT.
RH-101	-2.755E-03	2.229E-02	1.813E-02	2.229E-02	NOT IDENT.
SB-125	8.760E-03	5.893E-02	5.198E-02	5.893E-02	NOT IDENT.
CS-137	5.043E-03	3.639E-02	2.663E-02	3.639E-02	NOT IDENT.
PO-209	2.776E+00	5.000E+00	4.534E+00	5.000E+00	NOT IDENT.
BI-211	-1.730E-01	8.496E-01	6.226E-01	8.496E-01	NOT IDENT.
PA-233	-2.415E-02	4.495E-02	3.401E-02	4.495E-02	NOT IDENT.
PA-234M	-2.387E-02	3.567E+00	2.625E+00	3.567E+00	NOT IDENT.
NP-236	2.549E-02	3.386E-02	2.779E-02	3.386E-02	NOT IDENT.
NP-239	-2.488E-02	1.283E-01	1.085E-01	1.283E-01	NOT IDENT.
AM-241	-7.079E-03	3.470E-02	2.900E-02	3.470E-02	NOT IDENT.
AM-246	2.452E-02	9.655E-02	8.374E-02	9.655E-02	NOT IDENT.
CF-249	3.166E-03	2.540E-02	2.254E-02	2.540E-02	NOT IDENT.

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                 2040 SAVAGE ROAD                          *
*                              CHARLESTON ,SC 29417                         *
*                        GAMMA SPECTROSCOPY BACKGROUND REPORT               *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	282.9971
63.29	296.0593
74.66	348.4381
74.81	348.5528
74.81	348.5528
77.11	350.3054
77.11	350.3054
86.48	288.8468
87.30	289.3192
87.30	289.3192
92.58	292.3069
98.44	232.1330
103.76	249.8947
105.31	239.7218
129.07	234.4603
143.76	249.5750
198.00	212.4133
209.25	207.4549
228.18	165.0665
238.63	167.9123
242.00	168.4647
269.46	144.0226
270.25	144.1244
277.36	154.3170
295.22	146.6786
300.09	147.2738
312.17	141.9209
338.32	128.0136
351.93	130.2404
387.59	105.1448
409.46	121.1070
427.87	84.6158
463.00	98.3806
510.77	70.4650
583.19	59.3923
609.31	74.1190
661.66	79.2400
727.33	63.4033
763.13	38.2955
768.36	90.5670
785.37	55.6333
794.95	47.4651
806.17	48.6053
831.80	56.6279
860.56	52.4622
896.60	38.6484
911.20	37.2271
934.06	41.1089
964.77	40.5456
968.97	40.6016
1001.03	43.3619
1078.86	37.9322
1120.29	42.5535
1155.19	46.1291
1173.23	32.6666
1238.11	44.6981
1280.96	23.5085
1332.51	28.5873
1377.67	26.8724
1401.50	23.9669
1407.98	24.0046
1460.80	31.1967
1509.23	15.2956
1588.20	28.2165
1620.50	15.6771
1729.60	14.0330
1764.49	11.1038

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701043

Total Uranium Activity	2.0958E-02	ug/g
Total Uranium Counting Unc.	8.5996E-02	ug/g
Total Uranium Tpu	8.5996E-08	ug/g
Total Uranium Mda	4.7173E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:03:40.95

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration     : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701044.CNF;1
Sample date       : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:02:57
Sample ID         : G198701044           Sample quantity  : 1.29550E+02 GRAM
Detector name     : GAM02                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00         Elapsed real time: 0 04:00:03.86  0.0%
Energy tolerance : 2.00000 keV           Analyst Initials : MJH1
Abundance limit  : 75.00000              Sensitivity      : 3.00000
Batch ID          : 708133               Detector SN#     :
Matrix Spike ID  :                       LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.05*	47	664	1.18	125.64	120	13	3.28E-03	119.7	
2	4	74.69	317	383	1.33	148.90	142	20	2.20E-02	12.5	2.01E+00
3	4	77.06*	379	262	0.91	153.63	142	20	2.63E-02	8.7	
4	2	87.21	163	383	1.13	173.92	163	27	1.13E-02	21.5	1.93E+00
5	2	89.95	124	380	1.14	179.39	163	27	8.60E-03	27.8	
6	2	92.61*	191	375	1.15	184.71	163	27	1.32E-02	23.1	
7	0	124.30	34	298	0.60	248.04	245	7	2.33E-03	87.3	
8	0	129.57	28	376	0.71	258.56	254	8	1.95E-03	120.9	
9	0	143.75*	50	365	1.10	286.90	283	8	3.46E-03	73.4	
10	0	163.17*	15	454	4.20	325.70	319	11	1.07E-03	281.5	
11	2	185.83*	134	256	1.18	370.97	366	12	9.28E-03	28.0	2.04E+00
12	2	187.87	41	131	1.11	375.06	366	12	2.84E-03	49.6	
13	0	209.43*	100	319	1.18	418.14	414	10	6.93E-03	36.7	
14	3	238.63*	993	217	1.06	476.48	472	15	6.90E-02	4.1	2.78E+00
15	3	241.56	286	241	1.58	482.34	472	15	1.99E-02	12.8	
16	0	270.80	43	270	1.34	540.77	535	10	2.97E-03	73.6	
17	0	277.19	52	141	0.64	553.53	550	7	3.60E-03	40.5	
18	0	295.33*	280	242	1.02	589.78	585	10	1.95E-02	12.4	
19	0	300.17	62	177	0.97	599.46	596	8	4.29E-03	39.5	
20	0	328.11	85	195	1.07	655.29	650	11	5.90E-03	33.6	
21	0	338.30	222	215	1.24	675.64	671	11	1.54E-02	14.5	
22	0	351.89*	581	175	1.23	702.81	698	11	4.04E-02	6.4	
23	0	384.50	21	171	0.73	767.97	762	11	1.45E-03	122.8	
24	0	462.68	84	90	1.59	924.20	919	10	5.82E-03	23.8	
25	0	510.69*	80	175	2.53	1020.14	1013	17	5.52E-03	48.7	
26	0	523.12	37	69	3.53	1044.98	1039	10	2.56E-03	45.5	
27	0	583.00*	247	157	1.32	1164.65	1160	12	1.72E-02	12.6	
28	0	609.12*	379	154	1.56	1216.84	1211	15	2.63E-02	8.9	
29	0	661.22	65	60	1.58	1320.96	1317	9	4.52E-03	24.6	
30	0	678.30	30	75	4.83	1355.09	1348	15	2.05E-03	66.4	
31	0	727.85	69	88	1.22	1454.11	1447	12	4.76E-03	30.1	
32	0	768.78	47	117	1.34	1535.91	1528	16	3.29E-03	52.9	
33	0	816.76	33	110	5.84	1631.81	1618	23	2.33E-03	82.9	
34	0	859.70	66	33	3.52	1717.62	1711	14	4.57E-03	22.6	
35	0	870.24	24	38	1.12	1738.69	1733	9	1.65E-03	51.9	
36	0	911.40*	160	92	1.40	1820.94	1813	16	1.11E-02	15.9	
37	1	964.14	59	55	1.99	1926.36	1920	30	4.07E-03	26.7	1.70E+00
38	1	968.85*	99	41	1.99	1935.77	1920	30	6.87E-03	19.2	

Sample ID : G198701044 Acquisition date : 17-DEC-2007 12:02:57

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	995.31	17	22	1.55	1988.66	1985	7	1.16E-03	54.2	
40	0	1000.46*	35	19	1.09	1998.94	1993	11	2.40E-03	37.6	
41	0	1014.42	8	30	0.95	2026.85	2019	9	5.50E-04	134.8	
42	0	1111.62	31	25	3.42	2221.11	2214	13	2.12E-03	38.8	
43	0	1120.40	73	72	1.50	2238.66	2234	14	5.04E-03	28.1	
44	0	1147.86	36	39	7.90	2293.54	2284	20	2.52E-03	45.7	
45	0	1156.23	36	26	1.65	2310.27	2303	16	2.52E-03	36.3	
46	0	1292.09	12	55	8.43	2581.82	2565	21	8.16E-04	163.8	
47	0	1300.96	18	25	4.86	2599.55	2591	16	1.27E-03	64.4	
48	0	1378.03	38	19	1.60	2753.60	2747	16	2.62E-03	31.0	
49	0	1407.51	18	4	1.72	2812.52	2808	10	1.25E-03	32.7	
50	0	1460.69*	381	24	2.40	2918.82	2911	20	2.64E-02	6.2	
51	0	1609.25	11	9	3.81	3215.76	3207	12	7.57E-04	62.9	
52	0	1620.30	20	28	4.82	3237.86	3226	22	1.41E-03	69.3	
53	0	1680.27	8	10	0.61	3357.72	3350	13	5.67E-04	86.3	
54	0	1683.67	7	4	1.29	3364.54	3362	7	4.51E-04	61.8	
55	0	1703.52	11	4	2.23	3404.20	3399	13	7.80E-04	45.0	
56	0	1717.03	12	9	0.58	3431.21	3422	13	8.09E-04	62.3	
57	0	1729.13	34	9	4.80	3455.40	3447	17	2.33E-03	26.4	
58	0	1764.26*	54	19	2.33	3525.63	3518	13	3.76E-03	24.5	
59	0	1839.49	15	7	3.06	3676.02	3667	14	1.04E-03	45.5	
60	0	1846.75	14	5	0.67	3690.52	3686	9	9.37E-04	39.3	
61	0	1983.64	6	7	0.69	3964.17	3957	11	4.46E-04	93.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701044       *
* Acquisition date : 17-DEC-2007 12:02:57 Detector SN#    :                 *
* Detector ID      : GAM02                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:03.86     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701044           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.2955E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-OCT-2007 15:13:16 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.856E+00	6.720E-01	2.913E-01	0.000E+00
CS-137	5.105E-02	2.481E-02	3.129E-02	0.000E+00
TL-208	1.746E-01	4.423E-02	3.045E-02	0.000E+00
BI-212	4.197E-01	2.494E-01	2.321E-01	0.000E+00
PB-212	6.836E-01	6.890E-02	4.978E-02	0.000E+00
BI-214	5.086E-01	9.404E-02	6.170E-02	0.000E+00
PB-214	6.165E-01	8.498E-02	6.355E-02	0.000E+00
RA-223	1.019E-01	1.471E-01	1.614E-01	0.000E+00
AC-228	5.505E-01	1.769E-01	1.163E-01	0.000E+00
PA-234M	3.984E+00	2.951E+00	3.651E+00	0.000E+00
TH-234	8.832E-01	4.053E-01	4.058E-01	0.000E+00
U-235	1.019E-01	1.467E-01	1.741E-01	0.000E+00
NP-237	3.538E-01	1.518E-01	1.906E-01	0.000E+00
AM-243	1.630E-01	4.205E-02	4.405E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	9.484E-04	2.199E-02	3.750E-02	0.000E+00	NOT IDENT.
RH-101	9.079E-03	1.848E-02	3.003E-02	0.000E+00	NOT IDENT.
SB-125	1.013E-02	4.800E-02	8.251E-02	0.000E+00	NOT IDENT.
EU-155	-2.011E-02	5.108E-02	8.857E-02	0.000E+00	NOT IDENT.
PO-209	-4.381E+00	4.437E+00	5.852E+00	0.000E+00	NOT IDENT.
BI-211	-9.052E-02	5.389E-01	8.921E-01	0.000E+00	NOT IDENT.
PA-233	5.656E-03	3.369E-02	5.919E-02	0.000E+00	NOT IDENT.
NP-236	-7.331E-03	3.362E-02	5.493E-02	0.000E+00	NOT IDENT.
NP-239	8.121E-02	1.170E-01	2.011E-01	0.000E+00	NOT IDENT.
AM-241	1.681E-02	9.520E-02	1.580E-01	0.000E+00	NOT IDENT.
CM-243	3.357E-03	4.502E-02	7.968E-02	0.000E+00	NOT IDENT.
AM-246	-4.182E-02	6.552E-02	1.045E-01	0.000E+00	NOT IDENT.
CF-249	3.063E-03	2.293E-02	3.476E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:03:41.89

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701044.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:02:57
Sample ID        : G198701044           Sample quantity  : 1.29550E+02 GRAM
Detector name    : GAM02                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:03.86  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	381	10.66*	1.065E+00	4.856E+00	4.856E+00	14.12
CS-137	661.66	65	85.10*	2.183E+00	5.079E-02	5.105E-02	49.58
TL-208	277.36	52	6.31	4.356E+00	2.732E-01	2.732E-01	81.32
	510.77	80	22.60	2.710E+00	1.881E-01	1.881E-01	97.60
	583.19	247	84.50*	2.430E+00	1.746E-01	1.746E-01	25.85
	763.13	------	1.81	1.923E+00	------	Line Not Found	------
	860.56	66	12.42	1.724E+00	4.447E-01	4.447E-01	45.91
BI-212	727.33	69	11.80*	2.006E+00	4.197E-01	4.197E-01	60.63
	785.37	------	1.10	1.873E+00	------	Line Not Found	------
	1620.50	20	1.49	9.858E-01	2.009E+00	2.009E+00	138.78
PB-212	74.81	317	10.40	4.132E+00	1.069E+00	1.069E+00	26.32
	77.11	379	17.50	4.411E+00	7.104E-01	7.104E-01	19.35
	87.30	163	7.81	5.396E+00	5.617E-01	5.617E-01	43.78
	238.63	993	43.30*	4.862E+00	6.836E-01	6.836E-01	10.29
	300.09	62	3.28	4.103E+00	6.656E-01	6.656E-01	79.19
BI-214	609.31	379	46.10*	2.342E+00	5.085E-01	5.086E-01	18.87
	768.36	47	4.94	1.910E+00	7.270E-01	7.271E-01	106.09
	806.17	------	1.22	1.829E+00	------	Line Not Found	------
	934.06	------	3.03	1.596E+00	------	Line Not Found	------
	1120.29	73	15.10	1.346E+00	5.172E-01	5.172E-01	56.46
	1155.19	36	1.63	1.307E+00	2.469E+00	2.469E+00	72.90
	1238.11	------	5.79	1.228E+00	------	Line Not Found	------
	1280.96	------	1.43	1.191E+00	------	Line Not Found	------
	1377.67	38	4.00	1.117E+00	1.225E+00	1.225E+00	62.30
	1401.50	------	1.27	1.102E+00	------	Line Not Found	------
	1407.98	18	2.15	1.098E+00	1.102E+00	1.102E+00	65.76
	1509.23	------	2.11	1.038E+00	------	Line Not Found	------
	1729.60	34	2.92	9.456E-01	1.758E+00	1.758E+00	53.13
	1764.49	54	15.40	9.348E-01	5.449E-01	5.450E-01	49.39
PB-214	74.81	317	6.44	4.132E+00	1.726E+00	1.727E+00	26.32
	77.11	379	10.80	4.411E+00	1.151E+00	1.151E+00	19.35
	87.30	163	4.84	5.396E+00	9.063E-01	9.064E-01	43.78

Sample ID : G198701044 Acquisition date : 17-DEC-2007 12:02:57

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	286	7.43	4.820E+00	1.157E+00	1.157E+00	26.26
	295.22	280	19.30	4.153E+00	5.063E-01	5.064E-01	25.70
	351.93	581	37.60*	3.634E+00	6.164E-01	6.165E-01	14.07
RA-223	269.46	43	13.70*	4.432E+00	1.019E-01	1.019E-01	147.37
AC-228	129.07	28	2.42	6.594E+00	2.549E-01	2.549E-01	241.82
	209.25	100	3.89	5.323E+00	6.986E-01	6.986E-01	73.67
	270.25	43	3.46	4.432E+00	4.034E-01	4.034E-01	147.37
	338.32	222	11.27	3.746E+00	7.602E-01	7.602E-01	29.56
	409.46	------	1.92	3.231E+00	------ Line Not Found		------
	463.00	84	4.40	2.934E+00	9.405E-01	9.405E-01	47.97
	794.95	------	4.25	1.853E+00	------ Line Not Found		------
	911.20	160	25.80*	1.633E+00	5.505E-01	5.505E-01	32.79
	964.77	59	4.99	1.549E+00	1.097E+00	1.097E+00	53.89
	968.97	99	15.80	1.542E+00	5.883E-01	5.883E-01	39.09
	1588.20	------	3.22	9.997E-01	------ Line Not Found		------
PA-234M	1001.03	35	0.84*	1.496E+00	3.984E+00	3.984E+00	75.58
TH-234	63.29	47	4.80	2.566E+00	5.553E-01	5.553E-01	239.59
	92.58	191	5.41*	5.781E+00	8.832E-01	8.832E-01	46.82
U-235	143.76	50	10.96*	6.462E+00	1.019E-01	1.019E-01	146.90
NP-237	86.48	163	12.40*	5.396E+00	3.538E-01	3.538E-01	43.78
AM-243	74.66	317	68.20*	4.132E+00	1.630E-01	1.630E-01	26.32

Flag: "*" = Keyline

Sample ID : G198701044 Acquisition date : 17-DEC-2007 12:02:57

Total number of lines in spectrum 61
Number of unidentified lines 25
Number of lines tentatively identified by NID 36 59.02%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.856E+00	4.856E+00	0.686E+00	14.12	
CS-137	9.47E+08S	1.01	5.079E-02	5.105E-02	2.531E-02	49.58	
TL-208	4.43E+17S	1.00	1.746E-01	1.746E-01	0.451E-01	25.85	
BI-212	4.43E+17S	1.00	4.197E-01	4.197E-01	2.545E-01	60.63	
PB-212	4.43E+17S	1.00	6.836E-01	6.836E-01	0.703E-01	10.29	
BI-214	5.05E+10S	1.00	5.085E-01	5.086E-01	0.960E-01	18.87	
PB-214	5.05E+10S	1.00	6.164E-01	6.165E-01	0.867E-01	14.07	
RA-223	1.04E+12S	1.00	1.019E-01	1.019E-01	1.501E-01	147.37	
AC-228	4.43E+17S	1.00	5.505E-01	5.505E-01	1.805E-01	32.79	
PA-234M	1.41E+17S	1.00	3.984E+00	3.984E+00	3.011E+00	75.58	
TH-234	1.41E+17S	1.00	8.832E-01	8.832E-01	4.135E-01	46.82	
U-235	2.22E+16S	1.00	1.019E-01	1.019E-01	1.497E-01	146.90	
NP-237	6.75E+13S	1.00	3.538E-01	3.538E-01	1.549E-01	43.78	
AM-243	2.33E+11S	1.00	1.630E-01	1.630E-01	0.429E-01	26.32	
			---	---			
		Total Activity :	1.345E+01	1.345E+01			

Grand Total Activity : 1.345E+01 1.345E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701044 Acquisition date : 17-DEC-2007 12:02:57

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.95	124	380	1.14	179.39	163	27	8.60E-03	55.6	5.60E+00	
0	124.30	34	298	0.60	248.04	245	7	2.33E-03	****	6.61E+00	
0	163.17	15	454	4.20	325.70	319	11	1.07E-03	****	6.16E+00	
2	185.83	134	256	1.18	370.97	366	12	9.28E-03	56.0	5.74E+00	
2	187.87	41	131	1.11	375.06	366	12	2.84E-03	99.3	5.70E+00	
0	328.11	85	195	1.07	655.29	650	11	5.90E-03	67.3	3.83E+00	
0	384.50	21	171	0.73	767.97	762	11	1.45E-03	****	3.39E+00	
0	523.12	37	69	3.53	1044.98	1039	10	2.56E-03	91.0	2.66E+00	
0	678.30	30	75	4.83	1355.09	1348	15	2.05E-03	****	2.13E+00	
0	816.76	33	110	5.84	1631.81	1618	23	2.33E-03	****	1.81E+00	
0	870.24	24	38	1.12	1738.69	1733	9	1.65E-03	****	1.70E+00	
0	995.31	17	22	1.55	1988.66	1985	7	1.16E-03	****	1.50E+00	
0	1014.42	8	30	0.95	2026.85	2019	9	5.50E-04	****	1.48E+00	
0	1111.62	31	25	3.42	2221.11	2214	13	2.12E-03	77.6	1.36E+00	
0	1147.86	36	39	7.90	2293.54	2284	20	2.52E-03	91.3	1.32E+00	
0	1292.09	12	55	8.43	2581.82	2565	21	8.16E-04	****	1.18E+00	
0	1300.96	18	25	4.86	2599.55	2591	16	1.27E-03	****	1.17E+00	
0	1609.25	11	9	3.81	3215.76	3207	12	7.57E-04	****	9.90E-01	
0	1680.27	8	10	0.61	3357.72	3350	13	5.67E-04	****	9.62E-01	
0	1683.67	7	4	1.29	3364.54	3362	7	4.51E-04	****	9.61E-01	
0	1703.52	11	4	2.23	3404.20	3399	13	7.80E-04	90.0	9.54E-01	
0	1717.03	12	9	0.58	3431.21	3422	13	8.09E-04	****	9.50E-01	
0	1839.49	15	7	3.06	3676.02	3667	14	1.04E-03	90.9	9.15E-01	
0	1846.75	14	5	0.67	3690.52	3686	9	9.37E-04	78.6	9.13E-01	
0	1983.64	6	7	0.69	3964.17	3957	11	4.46E-04	****	8.87E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701044            *
* Acquisition date : 17-DEC-2007 12:02:57 Detector SN#    :                 *
* Detector ID      : GAM02                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:03.86     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701044           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.2955E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-OCT-2007 15:13:16 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.856E+00	6.720E-01	1.457E-01	6.720E-01
CS-137	5.105E-02	2.481E-02	1.565E-02	2.481E-02
TL-208	1.746E-01	4.423E-02	1.523E-02	4.423E-02
BI-212	4.197E-01	2.494E-01	1.161E-01	2.494E-01
PB-212	6.836E-01	6.890E-02	2.491E-02	6.890E-02
BI-214	5.086E-01	9.404E-02	3.087E-02	9.404E-02
PB-214	6.165E-01	8.498E-02	3.179E-02	8.498E-02
RA-223	1.019E-01	1.471E-01	8.074E-02	1.471E-01
AC-228	5.505E-01	1.769E-01	5.819E-02	1.769E-01
PA-234M	3.984E+00	2.951E+00	1.827E+00	2.951E+00
TH-234	8.832E-01	4.053E-01	2.030E-01	4.053E-01
U-235	1.019E-01	1.467E-01	8.712E-02	1.467E-01
NP-237	3.538E-01	1.518E-01	9.534E-02	1.518E-01
AM-243	1.630E-01	4.205E-02	2.204E-02	4.205E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	9.484E-04	2.199E-02	1.876E-02	2.199E-02	NOT IDENT.
RH-101	9.079E-03	1.848E-02	1.503E-02	1.848E-02	NOT IDENT.
SB-125	1.013E-02	4.800E-02	4.128E-02	4.800E-02	NOT IDENT.
EU-155	-2.011E-02	5.108E-02	4.431E-02	5.108E-02	NOT IDENT.
PO-209	-4.381E+00	4.437E+00	2.928E+00	4.437E+00	NOT IDENT.
BI-211	-9.052E-02	5.389E-01	4.463E-01	5.389E-01	NOT IDENT.
PA-233	5.656E-03	3.369E-02	2.961E-02	3.369E-02	NOT IDENT.
NP-236	-7.331E-03	3.362E-02	2.748E-02	3.362E-02	NOT IDENT.
NP-239	8.121E-02	1.170E-01	1.006E-01	1.170E-01	NOT IDENT.
AM-241	1.681E-02	9.520E-02	7.904E-02	9.520E-02	NOT IDENT.
CM-243	3.357E-03	4.502E-02	3.987E-02	4.502E-02	NOT IDENT.
AM-246	-4.182E-02	6.552E-02	5.229E-02	6.552E-02	NOT IDENT.
CF-249	3.063E-03	2.293E-02	1.739E-02	2.293E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	265.7586
63.29	285.3838
74.66	308.3634
74.81	308.4829
74.81	308.4829
77.11	310.2875
77.11	310.2875
86.48	320.1723
87.30	320.7786
87.30	320.7786
92.58	324.6187
98.44	296.6939
103.76	264.1841
105.31	289.2832
129.07	292.2883
143.76	311.0082
198.00	235.9894
209.25	232.4758
228.18	214.4158
238.63	228.1436
242.00	213.0139
269.46	201.6835
270.25	199.2856
277.36	186.8866
295.22	196.2953
300.09	171.5984
312.17	167.4063
338.32	152.7645
351.93	158.4328
387.59	121.4392
409.46	121.3634
427.87	105.2474
463.00	104.1527
510.77	98.9779
583.19	83.4596
609.31	94.8630
661.66	71.6290
727.33	65.0155
763.13	56.7179
768.36	68.2158
785.37	71.7471
794.95	50.7312
806.17	76.4557
831.80	62.8422
860.56	52.1057
896.60	56.0084
911.20	52.0685
934.06	41.7965
964.77	48.7661
968.97	48.8397
1001.03	45.7347
1078.86	46.9462
1120.29	53.8276
1155.19	0.0000
1173.23	47.3930
1238.11	39.4385
1280.96	54.7522
1332.51	29.3599
1377.67	26.6422
1401.50	15.9088
1407.98	28.9206
1460.80	24.0781
1509.23	20.1303
1588.20	36.7074
1620.50	18.6468
1729.60	15.2846
1764.49	20.2119

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701044

Total Uranium Activity	4.7158E-02	ug/g
Total Uranium Counting Unc.	6.7892E-02	ug/g
Total Uranium Tpu	6.7892E-08	ug/g
Total Uranium Mda	4.0311E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:04:22.31

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701045.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:03:21
Sample ID        : G198701045           Sample quantity  : 1.34210E+02 GRAM
Detector name    : GAM06                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.60  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	62.95*	42	365	0.88	125.95	123	7	2.89E-03	83.5	
2	0	65.95	67	231	1.05	131.93	130	5	4.65E-03	36.3	
3	3	74.50	261	370	0.92	149.02	142	15	1.81E-02	13.2	1.06E+00
4	3	76.72*	434	351	0.93	153.45	142	15	3.01E-02	8.7	
5	0	86.72	158	401	1.06	173.42	170	7	1.10E-02	22.5	
6	4	89.57	127	153	0.89	179.12	177	14	8.84E-03	14.8	8.40E-01
7	4	92.44*	231	454	1.47	184.86	177	14	1.61E-02	20.1	
8	0	98.46	62	391	0.64	196.89	193	8	4.28E-03	57.0	
9	0	115.07	41	308	1.07	230.07	227	7	2.81E-03	73.5	
10	2	128.84	79	245	0.90	257.60	254	12	5.48E-03	31.4	1.25E+00
11	2	131.27	45	313	1.21	262.45	254	12	3.14E-03	67.2	
12	0	144.43*	32	449	2.82	288.75	283	10	2.23E-03	133.4	
13	0	153.56	77	401	1.48	306.99	303	9	5.31E-03	48.5	
14	0	166.88	31	337	1.84	333.61	331	8	2.19E-03	102.0	
15	1	185.58*	165	309	1.27	370.97	366	14	1.14E-02	22.9	2.18E+00
16	1	188.48	43	224	1.27	376.77	366	14	2.99E-03	56.4	
17	0	208.78	107	372	0.73	417.33	413	9	7.44E-03	33.8	
18	4	238.29*	1032	237	1.14	476.29	469	18	7.16E-02	4.3	7.21E-01
19	4	241.16	320	288	1.62	482.02	469	18	2.22E-02	13.6	
20	0	270.41	85	283	1.57	540.49	535	11	5.90E-03	39.9	
21	0	276.47	46	225	1.54	552.59	550	8	3.22E-03	57.8	
22	0	286.67	14	273	2.63	572.97	569	11	9.73E-04	229.8	
23	0	294.86*	332	270	1.18	589.34	583	12	2.30E-02	11.5	
24	0	300.50	130	246	0.75	600.61	595	12	9.01E-03	25.8	
25	0	327.98	85	158	0.82	655.53	651	9	5.92E-03	28.7	
26	0	337.89	172	246	1.22	675.33	671	11	1.19E-02	19.1	
27	0	351.60*	545	184	1.01	702.72	697	11	3.78E-02	6.8	
28	0	441.69	27	150	3.88	882.77	879	13	1.84E-03	97.1	
29	0	462.98*	52	137	1.05	925.32	919	10	3.60E-03	46.9	
30	0	499.38	26	82	0.99	998.06	992	9	1.83E-03	65.2	
31	0	510.67*	79	214	1.98	1020.65	1014	15	5.50E-03	52.0	
32	0	573.05	13	78	0.55	1145.31	1140	8	8.84E-04	123.4	
33	0	582.91*	328	131	1.58	1165.03	1160	12	2.28E-02	9.4	
34	0	609.01*	329	155	1.14	1217.19	1212	12	2.29E-02	9.8	
35	0	661.78	25	57	1.84	1322.68	1317	9	1.73E-03	58.6	
36	0	679.61	19	31	1.06	1358.32	1355	7	1.33E-03	52.8	
37	0	727.41	86	119	1.71	1453.87	1444	16	5.96E-03	30.5	
38	0	768.58	28	111	0.76	1536.17	1529	15	1.97E-03	82.5	

Sample ID : G198701045 Acquisition date : 17-DEC-2007 12:03:21

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	2	785.65	42	60	2.05	1570.29	1564	33	2.90E-03	41.1	7.41E-01
40	2	794.74	42	60	2.05	1588.46	1564	33	2.93E-03	38.5	
41	0	827.06	13	26	0.89	1653.06	1649	7	8.80E-04	71.4	
42	0	861.18	71	83	1.78	1721.28	1715	17	4.92E-03	31.5	
43	0	903.74	36	48	2.40	1806.37	1799	14	2.48E-03	44.8	
44	0	910.94*	291	49	1.65	1820.77	1813	15	2.02E-02	8.3	
45	0	934.16	17	34	2.33	1867.19	1861	9	1.21E-03	64.8	
46	0	940.29	18	18	1.28	1879.45	1875	8	1.24E-03	48.9	
47	1	964.39	54	35	1.98	1927.64	1917	25	3.74E-03	24.7	1.41E+00
48	1	968.76*	143	17	1.95	1936.36	1917	25	9.95E-03	11.1	
49	0	1120.57*	42	58	1.28	2239.91	2233	10	2.93E-03	35.0	
50	2	1134.24	24	23	2.30	2267.24	2261	38	1.67E-03	42.4	1.72E+00
51	2	1147.22	22	19	2.31	2293.20	2261	38	1.50E-03	49.0	
52	0	1239.44	74	18	2.96	2477.60	2471	16	5.13E-03	18.6	
53	0	1332.78	14	13	1.87	2664.27	2656	11	9.62E-04	58.1	
54	0	1341.89	19	23	0.61	2682.50	2674	15	1.32E-03	59.3	
55	0	1377.24*	24	26	2.89	2753.18	2747	13	1.66E-03	56.2	
56	0	1460.39*	358	31	1.93	2919.50	2910	17	2.49E-02	6.6	
57	0	1473.69	28	35	7.05	2946.10	2932	24	1.92E-03	60.4	
58	0	1482.77	12	13	3.19	2964.25	2958	13	8.33E-04	68.3	
59	0	1516.38	23	13	3.33	3031.48	3023	18	1.60E-03	42.7	
60	0	1556.78	17	14	0.66	3112.29	3103	15	1.15E-03	56.5	
61	0	1593.15	18	39	4.90	3185.05	3175	16	1.22E-03	89.9	
62	0	1620.73	12	15	1.54	3240.21	3235	10	8.33E-04	66.9	
63	0	1630.84	16	8	1.19	3260.43	3256	10	1.12E-03	40.5	
64	0	1667.15	28	2	4.05	3333.07	3328	12	1.91E-03	22.7	
65	0	1729.64	20	9	2.27	3458.08	3452	12	1.40E-03	37.0	
66	0	1765.02*	66	26	1.02	3528.85	3521	17	4.61E-03	23.6	
67	0	1807.52	16	3	4.15	3613.88	3607	12	1.10E-03	33.3	
68	0	1857.37	10	5	0.52	3713.62	3706	12	6.62E-04	60.3	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701045       *
* Acquisition date : 17-DEC-2007 12:03:21 Detector SN#    :                 *
* Detector ID      : GAM06                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.60     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701045           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.3421E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 20-FEB-2007 10:58:43 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.894E+00	7.046E-01	3.475E-01	0.000E+00
CS-137	2.084E-02	2.399E-02	3.537E-02	0.000E+00
TL-208	2.466E-01	4.823E-02	3.428E-02	0.000E+00
BI-212	5.593E-01	3.371E-01	2.410E-01	0.000E+00
PB-212	7.576E-01	7.839E-02	5.732E-02	0.000E+00
BI-214	4.706E-01	9.596E-02	7.184E-02	0.000E+00
PB-214	6.152E-01	8.994E-02	6.925E-02	0.000E+00
RA-223	2.162E-01	1.695E-01	1.734E-01	0.000E+00
AC-228	1.066E+00	2.028E-01	1.214E-01	0.000E+00
TH-234	1.084E+00	4.355E-01	3.905E-01	0.000E+00
U-235	6.962E-02	1.820E-01	1.844E-01	0.000E+00
NP-236	3.933E-02	4.405E-02	5.386E-02	0.000E+00
NP-237	3.448E-01	1.551E-01	2.129E-01	0.000E+00
AM-243	1.297E-01	3.515E-02	4.619E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-8.020E-03		2.246E-02	3.685E-02	0.000E+00	FAIL ABUN
RH-101	1.351E-03		2.118E-02	3.515E-02	0.000E+00	NOT IDENT.
SB-125	-1.071E-02		5.216E-02	8.707E-02	0.000E+00	NOT IDENT.
EU-155	2.553E-02		5.830E-02	1.037E-01	0.000E+00	NOT IDENT.
PO-209	-1.852E+00		5.014E+00	6.867E+00	0.000E+00	NOT IDENT.
BI-211	-8.156E-01		7.389E-01	9.198E-01	0.000E+00	NOT IDENT.
PA-233	-8.239E-03		3.711E-02	6.379E-02	0.000E+00	NOT IDENT.
PA-234M	2.538E+00		2.694E+00	4.829E+00	0.000E+00	NOT IDENT.
NP-239	5.113E-02		1.210E-01	2.192E-01	0.000E+00	NOT IDENT.
AM-241	3.888E-02		8.840E-02	1.468E-01	0.000E+00	NOT IDENT.
CM-243	2.669E-03		5.195E-02	9.121E-02	0.000E+00	NOT IDENT.
AM-246	2.206E-02		7.222E-02	1.278E-01	0.000E+00	NOT IDENT.
CF-249	1.275E-02		2.289E-02	4.036E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:04:23.27

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701045.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:03:21
Sample ID        : G198701045           Sample quantity  : 1.34210E+02 GRAM
Detector name    : GAM06                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.60  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	358	10.66*	9.604E-01	4.894E+00	4.894E+00	14.69
CS-137	661.66	25	85.10*	1.976E+00	2.073E-02	2.084E-02	117.46
TL-208	277.36	46	6.31	3.946E+00	2.604E-01	2.604E-01	115.84
	510.77	79	22.60	2.457E+00	1.996E-01	1.996E-01	104.19
	583.19	328	84.50*	2.202E+00	2.466E-01	2.466E-01	19.95
	763.13	------	1.81	1.741E+00	------	Line Not Found	------
	860.56	71	12.42	1.558E+00	5.124E-01	5.124E-01	63.65
BI-212	727.33	86	11.80*	1.818E+00	5.593E-01	5.593E-01	61.50
	785.37	42	1.10	1.695E+00	3.137E+00	3.137E+00	82.56
	1620.50	12	1.49	8.877E-01	1.269E+00	1.269E+00	134.00
PB-212	74.81	261	10.40	4.129E+00	8.507E-01	8.507E-01	27.65
	77.11	434	17.50	4.356E+00	7.959E-01	7.959E-01	19.31
	87.30	158	7.81	5.181E+00	5.475E-01	5.475E-01	45.89
	238.63	1032	43.30*	4.398E+00	7.576E-01	7.576E-01	10.56
	300.09	130	3.28	3.708E+00	1.492E+00	1.492E+00	52.03
BI-214	609.31	329	46.10*	2.122E+00	4.706E-01	4.706E-01	20.80
	768.36	28	4.94	1.729E+00	4.637E-01	4.638E-01	165.28
	806.17	------	1.22	1.656E+00	------	Line Not Found	------
	934.06	17	3.03	1.443E+00	5.562E-01	5.562E-01	129.94
	1120.29	42	15.10	1.215E+00	3.213E-01	3.214E-01	70.36
	1155.19	------	1.63	1.181E+00	------	Line Not Found	------
	1238.11	74	5.79	1.107E+00	1.612E+00	1.613E+00	37.66
	1280.96	------	1.43	1.075E+00	------	Line Not Found	------
	1377.67	24	4.00	1.008E+00	8.311E-01	8.312E-01	112.49
	1401.50	------	1.27	9.936E-01	------	Line Not Found	------
	1407.98	------	2.15	9.898E-01	------	Line Not Found	------
	1509.23	------	2.11	9.357E-01	------	Line Not Found	------
	1729.60	20	2.92	8.509E-01	1.137E+00	1.137E+00	74.32
	1764.49	66	15.40	8.409E-01	7.177E-01	7.177E-01	47.55
PB-214	74.81	261	6.44	4.129E+00	1.374E+00	1.374E+00	27.65
	77.11	434	10.80	4.356E+00	1.290E+00	1.290E+00	19.31
	87.30	158	4.84	5.181E+00	8.834E-01	8.835E-01	45.89

Sample ID : G198701045 Acquisition date : 17-DEC-2007 12:03:21

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	320	7.43	4.360E+00	1.380E+00	1.380E+00	27.92
	295.22	332	19.30	3.761E+00	6.392E-01	6.392E-01	23.97
	351.93	545	37.60*	3.292E+00	6.152E-01	6.152E-01	14.92
RA-223	269.46	85	13.70*	4.011E+00	2.162E-01	2.162E-01	79.98
AC-228	129.07	79	2.42	6.052E+00	7.537E-01	7.537E-01	63.06
	209.25	107	3.89	4.820E+00	7.986E-01	7.986E-01	67.85
	270.25	85	3.46	4.011E+00	8.560E-01	8.560E-01	79.98
	338.32	172	11.27	3.393E+00	6.289E-01	6.289E-01	38.80
	409.46	------	1.92	2.927E+00	------ Line Not Found		------
	463.00	52	4.40	2.658E+00	6.200E-01	6.200E-01	93.96
	794.95	42	4.25	1.677E+00	8.289E-01	8.289E-01	77.39
	911.20	291	25.80*	1.478E+00	1.066E+00	1.066E+00	19.42
	964.77	54	4.99	1.401E+00	1.078E+00	1.078E+00	50.34
	968.97	143	15.80	1.395E+00	9.095E-01	9.095E-01	24.25
	1588.20	------	3.22	9.005E-01	------ Line Not Found		------
TH-234	63.29	42	4.80	2.720E+00	4.460E-01	4.460E-01	167.24
	92.58	231	5.41*	5.511E+00	1.084E+00	1.084E+00	40.98
U-235	143.76	32	10.96*	5.880E+00	6.962E-02	6.962E-02	266.79
NP-236	98.44	62	38.00*	5.762E+00	3.933E-02	3.933E-02	114.29
NP-237	86.48	158	12.40*	5.181E+00	3.448E-01	3.448E-01	45.89
AM-243	74.66	261	68.20*	4.129E+00	1.297E-01	1.297E-01	27.65

Flag: "*" = Keyline

Sample ID : G198701045 Acquisition date : 17-DEC-2007 12:03:21

Total number of lines in spectrum 68
Number of unidentified lines 29
Number of lines tentatively identified by NID 39 57.35%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.894E+00	4.894E+00	0.719E+00	14.69	
CS-137	9.47E+08S	1.01	2.073E-02	2.084E-02	2.448E-02	117.46	
TL-208	4.43E+17S	1.00	2.466E-01	2.466E-01	0.492E-01	19.95	
BI-212	4.43E+17S	1.00	5.593E-01	5.593E-01	3.440E-01	61.50	
PB-212	4.43E+17S	1.00	7.576E-01	7.576E-01	0.800E-01	10.56	
BI-214	5.05E+10S	1.00	4.706E-01	4.706E-01	0.979E-01	20.80	
PB-214	5.05E+10S	1.00	6.152E-01	6.152E-01	0.918E-01	14.92	
RA-223	1.04E+12S	1.00	2.162E-01	2.162E-01	1.729E-01	79.98	
AC-228	4.43E+17S	1.00	1.066E+00	1.066E+00	0.207E+00	19.42	
TH-234	1.41E+17S	1.00	1.084E+00	1.084E+00	0.444E+00	40.98	
U-235	2.22E+16S	1.00	6.962E-02	6.962E-02	18.58E-02	266.79	
NP-236	4.89E+12S	1.00	3.933E-02	3.933E-02	4.495E-02	114.29	
NP-237	6.75E+13S	1.00	3.448E-01	3.448E-01	1.582E-01	45.89	
AM-243	2.33E+11S	1.00	1.297E-01	1.297E-01	0.359E-01	27.65	
			---	---			
	Total Activity :		1.051E+01	1.051E+01			

Grand Total Activity : 1.051E+01 1.051E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701045 Acquisition date : 17-DEC-2007 12:03:21

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	65.95	67	231	1.05	131.93	130	5	4.65E-03	72.6	3.11E+00	
4	89.57	127	153	0.89	179.12	177	14	8.84E-03	29.7	5.36E+00	
0	115.07	41	308	1.07	230.07	227	7	2.81E-03	****	6.07E+00	
2	131.27	45	313	1.21	262.45	254	12	3.14E-03	****	6.03E+00	
0	153.56	77	401	1.48	306.99	303	9	5.31E-03	97.1	5.74E+00	
0	166.88	31	337	1.84	333.61	331	8	2.19E-03	****	5.52E+00	
1	185.58	165	309	1.27	370.97	366	14	1.14E-02	45.8	5.20E+00	
1	188.48	43	224	1.27	376.77	366	14	2.99E-03	****	5.15E+00	
0	286.67	14	273	2.63	572.97	569	11	9.73E-04	****	3.84E+00	
0	327.98	85	158	0.82	655.53	651	9	5.92E-03	57.4	3.47E+00	
0	441.69	27	150	3.88	882.77	879	13	1.84E-03	****	2.76E+00	
0	499.38	26	82	0.99	998.06	992	9	1.83E-03	****	2.50E+00	
0	573.05	13	78	0.55	1145.31	1140	8	8.84E-04	****	2.23E+00	
0	679.61	19	31	1.06	1358.32	1355	7	1.33E-03	****	1.93E+00	
0	827.06	13	26	0.89	1653.06	1649	7	8.80E-04	****	1.62E+00	
0	903.74	36	48	2.40	1806.37	1799	14	2.48E-03	89.6	1.49E+00	
0	940.29	18	18	1.28	1879.45	1875	8	1.24E-03	97.8	1.43E+00	
2	1134.24	24	23	2.30	2267.24	2261	38	1.67E-03	84.9	1.20E+00	
2	1147.22	22	19	2.31	2293.20	2261	38	1.50E-03	98.0	1.19E+00	
0	1332.78	14	13	1.87	2664.27	2656	11	9.62E-04	****	1.04E+00	T
0	1341.89	19	23	0.61	2682.50	2674	15	1.32E-03	****	1.03E+00	
0	1473.69	28	35	7.05	2946.10	2932	24	1.92E-03	****	9.53E-01	
0	1482.77	12	13	3.19	2964.25	2958	13	8.33E-04	****	9.49E-01	
0	1516.38	23	13	3.33	3031.48	3023	18	1.60E-03	85.5	9.32E-01	
0	1556.78	17	14	0.66	3112.29	3103	15	1.15E-03	****	9.14E-01	
0	1593.15	18	39	4.90	3185.05	3175	16	1.22E-03	****	8.99E-01	
0	1630.84	16	8	1.19	3260.43	3256	10	1.12E-03	81.0	8.84E-01	
0	1667.15	28	2	4.05	3333.07	3328	12	1.91E-03	45.3	8.71E-01	
0	1807.52	16	3	4.15	3613.88	3607	12	1.10E-03	66.6	8.30E-01	
0	1857.37	10	5	0.52	3713.62	3706	12	6.62E-04	****	8.19E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701045            *
* Acquisition date : 17-DEC-2007 12:03:21 Detector SN#    :                 *
* Detector ID      : GAM06                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.60     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701045           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.3421E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 20-FEB-2007 10:58:43 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.894E+00	7.046E-01	1.739E-01	7.046E-01
CS-137	2.084E-02	2.399E-02	1.770E-02	2.399E-02
TL-208	2.466E-01	4.823E-02	1.715E-02	4.823E-02
BI-212	5.593E-01	3.371E-01	1.206E-01	3.371E-01
PB-212	7.576E-01	7.839E-02	2.868E-02	7.839E-02
BI-214	4.706E-01	9.596E-02	3.594E-02	9.596E-02
PB-214	6.152E-01	8.994E-02	3.465E-02	8.994E-02
RA-223	2.162E-01	1.695E-01	8.677E-02	1.695E-01
AC-228	1.066E+00	2.028E-01	6.072E-02	2.028E-01
TH-234	1.084E+00	4.355E-01	1.954E-01	4.355E-01
U-235	6.962E-02	1.820E-01	9.226E-02	1.820E-01
NP-236	3.933E-02	4.405E-02	2.694E-02	4.405E-02
NP-237	3.448E-01	1.551E-01	1.065E-01	1.551E-01
AM-243	1.297E-01	3.515E-02	2.311E-02	3.515E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-8.020E-03	2.246E-02	1.844E-02	2.246E-02	FAIL ABUN
RH-101	1.351E-03	2.118E-02	1.758E-02	2.118E-02	NOT IDENT.
SB-125	-1.071E-02	5.216E-02	4.356E-02	5.216E-02	NOT IDENT.
EU-155	2.553E-02	5.830E-02	5.190E-02	5.830E-02	NOT IDENT.
PO-209	-1.852E+00	5.014E+00	3.435E+00	5.014E+00	NOT IDENT.
BI-211	-8.156E-01	7.389E-01	4.602E-01	7.389E-01	NOT IDENT.
PA-233	-8.239E-03	3.711E-02	3.192E-02	3.711E-02	NOT IDENT.
PA-234M	2.538E+00	2.694E+00	2.416E+00	2.694E+00	NOT IDENT.
NP-239	5.113E-02	1.210E-01	1.097E-01	1.210E-01	NOT IDENT.
AM-241	3.888E-02	8.840E-02	7.347E-02	8.840E-02	NOT IDENT.
CM-243	2.669E-03	5.195E-02	4.563E-02	5.195E-02	NOT IDENT.
AM-246	2.206E-02	7.222E-02	6.394E-02	7.222E-02	NOT IDENT.
CF-249	1.275E-02	2.289E-02	2.019E-02	2.289E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
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ENERGY	MDA COUNTS
59.54	276.0862
63.29	292.8206
74.66	361.5494
74.81	361.6714
74.81	361.6714
77.11	347.5266
77.11	347.5266
86.48	395.9981
87.30	303.0631
87.30	303.0631
92.58	290.2345
98.44	297.5335
103.76	323.9444
105.31	322.7930
129.07	342.1246
143.76	307.1896
198.00	291.4868
209.25	286.4815
228.18	234.2228
238.63	262.2943
242.00	239.1456
269.46	202.3236
270.25	202.4712
277.36	238.0719
295.22	186.7327
300.09	185.5664
312.17	183.5192
338.32	167.4130
351.93	164.1043
387.59	130.1298
409.46	146.7377
427.87	114.5605
463.00	114.4784
510.77	115.9003
583.19	92.6294
609.31	112.5938
661.66	80.1310
727.33	61.3506
763.13	75.3168
768.36	75.4761
785.37	65.8569
794.95	66.1061
806.17	63.3305
831.80	85.9578
860.56	62.5547
896.60	63.3735
911.20	49.5446
934.06	49.9377
964.77	45.4135
968.97	34.2883
1001.03	49.2407
1078.86	41.1157
1120.29	60.0089
1155.19	34.4077
1173.23	47.0760
1238.11	46.9531
1280.96	41.5574
1332.51	21.0581
1377.67	27.8192
1401.50	36.7280
1407.98	26.5681
1460.80	29.8043
1509.23	12.5596
1588.20	38.3525
1620.50	19.3125
1729.60	18.8198
1764.49	21.7967

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701045

Total Uranium Activity	3.2215E-02	ug/g
Total Uranium Counting Unc.	8.4228E-02	ug/g
Total Uranium Tpu	8.4228E-08	ug/g
Total Uranium Mda	4.2688E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:05:06.10

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701046.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:03:45
Sample ID        : G198701046           Sample quantity  : 1.31800E+02 GRAM
Detector name    : GAM07                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:27.38  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.28*	71	440	1.08	126.06	122	8	4.95E-03	58.0	
2	3	74.96*	367	436	1.05	149.42	143	15	2.55E-02	11.1	1.47E+00
3	3	77.28*	613	407	1.01	154.05	143	15	4.26E-02	7.1	
4	0	84.31*	73	430	1.59	168.11	165	7	5.08E-03	56.1	
5	0	87.33*	157	373	1.35	174.15	172	6	1.09E-02	24.8	
6	0	90.23	92	384	0.97	179.95	177	6	6.39E-03	35.4	
7	0	93.11*	261	512	1.29	185.69	182	9	1.81E-02	18.7	
8	0	99.95	68	362	1.23	199.38	196	8	4.70E-03	50.4	
9	0	129.34	37	409	0.86	258.14	254	8	2.55E-03	97.0	
10	0	144.48*	32	346	1.47	288.42	285	8	2.25E-03	107.7	
11	0	154.30	16	412	0.64	308.05	305	9	1.14E-03	224.8	
12	0	185.97*	217	396	1.44	371.38	365	12	1.51E-02	21.0	
13	0	209.79	116	331	1.01	419.00	414	10	8.06E-03	30.7	
14	5	238.92*	1171	211	1.16	477.23	471	22	8.13E-02	3.9	9.03E-01
15	5	241.81	301	309	1.99	483.03	471	22	2.09E-02	17.3	
16	0	270.66	138	214	1.24	540.71	537	10	9.57E-03	21.6	
17	0	277.94	45	204	1.11	555.25	551	8	3.15E-03	56.5	
18	0	295.50	332	168	1.18	590.37	586	8	2.30E-02	8.7	
19	0	301.05	122	228	1.40	601.47	596	13	8.45E-03	27.4	
20	0	306.98	74	147	3.39	613.32	609	10	5.12E-03	32.9	
21	0	328.42	52	229	1.42	656.19	651	10	3.63E-03	56.2	
22	0	338.67*	211	214	1.25	676.70	672	11	1.46E-02	16.0	
23	0	352.09*	610	278	1.37	703.51	697	15	4.24E-02	7.4	
24	0	360.77	31	81	0.83	720.89	718	6	2.18E-03	48.6	
25	0	402.15	37	77	1.06	803.61	800	7	2.60E-03	42.4	
26	0	404.96	27	91	1.41	809.24	806	8	1.89E-03	63.3	
27	0	409.75	54	135	2.05	818.81	814	11	3.75E-03	43.8	
28	0	463.26*	86	143	1.13	925.81	921	12	6.00E-03	30.7	
29	0	502.91	19	102	0.50	1005.09	999	11	1.32E-03	105.5	
30	0	511.08*	113	173	1.81	1021.41	1013	15	7.88E-03	34.3	
31	0	583.55*	299	87	1.43	1166.33	1160	13	2.07E-02	9.7	
32	0	609.91*	418	140	1.42	1219.04	1211	16	2.91E-02	8.3	
33	0	662.27	131	79	1.48	1323.73	1319	10	9.12E-03	15.4	
34	0	727.94*	81	63	1.79	1455.05	1450	11	5.63E-03	24.1	
35	1	763.76	28	34	1.83	1526.67	1520	29	1.96E-03	48.9	1.32E+00
36	1	766.59	34	35	1.83	1532.32	1520	29	2.37E-03	42.2	
37	1	769.26	30	30	1.50	1537.67	1520	29	2.10E-03	41.6	
38	1	772.80	37	31	1.84	1544.75	1520	29	2.56E-03	31.6	

Sample ID : G198701046 Acquisition date : 17-DEC-2007 12:03:45

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	794.79*	53	55	1.04	1588.71	1583	12	3.66E-03	32.6	
40	0	860.79	57	49	1.74	1720.70	1714	13	3.97E-03	28.4	
41	0	911.68*	246	39	1.51	1822.44	1817	13	1.71E-02	8.8	
42	0	935.19	42	28	1.90	1869.45	1865	12	2.95E-03	28.9	
43	1	941.14	28	20	1.95	1881.35	1878	24	1.94E-03	30.4	1.91E+00
44	1	948.14	24	30	1.95	1895.36	1878	24	1.68E-03	51.1	
45	1	965.14	65	33	1.96	1929.36	1922	24	4.50E-03	21.0	2.23E+00
46	1	969.56	175	22	1.87	1938.18	1922	24	1.22E-02	9.4	
47	0	1003.44*	40	37	5.99	2005.92	1995	22	2.77E-03	48.2	
48	0	1060.88	12	25	1.59	2120.80	2116	7	8.43E-04	73.6	
49	0	1094.45	20	20	0.90	2187.91	2184	7	1.36E-03	44.8	
50	0	1112.37	29	44	3.89	2223.76	2216	14	1.99E-03	53.2	
51	0	1121.16	105	59	1.82	2241.34	2236	15	7.31E-03	19.1	
52	0	1148.87	23	24	0.68	2296.74	2289	13	1.56E-03	50.9	
53	0	1181.70	51	58	10.29	2362.39	2349	26	3.55E-03	43.3	
54	0	1237.93	49	44	4.82	2474.84	2467	16	3.37E-03	33.8	
55	0	1338.84	26	20	2.48	2676.62	2668	17	1.83E-03	44.3	
56	0	1346.27	12	14	3.87	2691.49	2685	13	8.36E-04	68.6	
57	0	1378.79	35	14	1.98	2756.52	2748	14	2.43E-03	28.3	
58	0	1387.24	34	13	3.14	2773.42	2763	19	2.36E-03	31.5	
59	0	1461.58*	514	30	1.97	2922.08	2913	20	3.57E-02	5.3	
60	0	1512.37	30	30	0.57	3023.65	3014	17	2.05E-03	48.4	
61	0	1540.18	7	21	3.20	3079.26	3070	14	4.71E-04	148.5	
62	0	1580.29	26	6	2.66	3159.46	3152	14	1.78E-03	29.3	
63	0	1589.05	23	15	2.17	3176.98	3172	10	1.60E-03	37.7	
64	0	1604.95	7	16	0.56	3208.79	3201	10	4.63E-04	122.4	
65	0	1721.57	16	15	4.95	3442.00	3426	18	1.08E-03	61.4	
66	0	1731.10	23	12	0.65	3461.05	3451	15	1.63E-03	37.5	
67	0	1765.67*	78	9	1.93	3530.18	3523	17	5.43E-03	16.1	
68	0	1813.04	10	6	1.25	3624.92	3620	10	7.27E-04	56.3	
69	0	1928.76	7	6	0.57	3856.35	3851	9	4.62E-04	79.8	
70	0	1934.66	9	3	1.37	3868.15	3864	10	6.28E-04	47.2	
71	0	1963.01	8	12	5.00	3924.85	3916	15	5.83E-04	93.9	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701046       *
* Acquisition date : 17-DEC-2007 12:03:45 Detector SN#    :                 *
* Detector ID      : GAM07                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:27.38     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701046           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.3180E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-OCT-2007 13:07:28 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.887E+00	6.852E-01	2.746E-01	0.000E+00
CS-137	9.490E-02	2.946E-02	2.688E-02	0.000E+00
TL-208	1.939E-01	3.903E-02	2.847E-02	0.000E+00
BI-212	4.565E-01	2.185E-01	2.147E-01	0.000E+00
PB-212	7.418E-01	7.185E-02	4.486E-02	0.000E+00
BI-214	5.173E-01	9.079E-02	5.814E-02	0.000E+00
PB-214	5.919E-01	9.142E-02	5.644E-02	0.000E+00
RA-223	3.014E-01	1.291E-01	1.451E-01	0.000E+00
AC-228	7.734E-01	1.433E-01	1.015E-01	0.000E+00
TH-234	9.400E-01	3.521E-01	3.232E-01	0.000E+00
U-235	6.072E-02	1.282E-01	1.524E-01	0.000E+00
NP-236	3.426E-02	3.397E-02	4.341E-02	0.000E+00
NP-237	2.524E-01	1.240E-01	1.483E-01	0.000E+00
AM-243	1.187E-01	2.711E-02	3.335E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	7.343E-03		2.345E-02	3.597E-02	0.000E+00	NOT IDENT.
RH-101	1.180E-02		1.702E-02	2.963E-02	0.000E+00	NOT IDENT.
SB-125	-1.478E-02		4.500E-02	7.427E-02	0.000E+00	NOT IDENT.
EU-155	4.866E-03		5.004E-02	8.331E-02	0.000E+00	NOT IDENT.
PO-209	-1.332E+00		4.204E+00	6.588E+00	0.000E+00	NOT IDENT.
BI-211	-1.673E-01		5.286E-01	8.671E-01	0.000E+00	NOT IDENT.
PA-233	1.455E-02		3.520E-02	5.513E-02	0.000E+00	NOT IDENT.
PA-234M	-1.182E+00		2.626E+00	3.685E+00	0.000E+00	NOT IDENT.
NP-239	-6.301E-02		1.052E-01	1.816E-01	0.000E+00	NOT IDENT.
AM-241	-1.135E-02		4.663E-02	7.394E-02	0.000E+00	NOT IDENT.
CM-243	1.080E-02		4.627E-02	7.260E-02	0.000E+00	NOT IDENT.
AM-246	4.361E-02		6.473E-02	1.181E-01	0.000E+00	NOT IDENT.
CF-249	-4.587E-03		1.982E-02	3.327E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:05:07.05

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701046.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:03:45
Sample ID        : G198701046           Sample quantity  : 1.31800E+02 GRAM
Detector name    : GAM07                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:27.38  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	514	10.66*	1.166E+00	5.887E+00	5.887E+00	11.88
CS-137	661.66	131	85.10*	2.328E+00	9.441E-02	9.490E-02	31.68
TL-208	277.36	45	6.31	4.662E+00	2.197E-01	2.197E-01	113.12
	510.77	113	22.60	2.899E+00	2.465E-01	2.465E-01	68.92
	583.19	299	84.50*	2.594E+00	1.939E-01	1.939E-01	20.53
	763.13	28	1.81	2.055E+00	1.079E+00	1.079E+00	98.11
	860.56	57	12.42	1.848E+00	3.550E-01	3.550E-01	57.26
BI-212	727.33	81	11.80*	2.144E+00	4.565E-01	4.565E-01	48.84
	785.37	------	1.10	2.005E+00	------	Line Not Found	------
	1620.50	------	1.49	1.077E+00	------	Line Not Found	------
PB-212	74.81	367	10.40	6.454E+00	7.783E-01	7.783E-01	23.31
	77.11	613	17.50	6.621E+00	7.533E-01	7.533E-01	15.86
	87.30	157	7.81	7.132E+00	4.007E-01	4.007E-01	50.13
	238.63	1171	43.30*	5.193E+00	7.418E-01	7.418E-01	9.88
	300.09	122	3.28	4.395E+00	1.202E+00	1.202E+00	55.10
BI-214	609.31	418	46.10*	2.499E+00	5.173E-01	5.173E-01	17.91
	768.36	30	4.94	2.042E+00	4.277E-01	4.277E-01	83.49
	806.17	------	1.22	1.959E+00	------	Line Not Found	------
	934.06	42	3.03	1.716E+00	1.163E+00	1.163E+00	58.26
	1120.29	105	15.10	1.460E+00	6.799E-01	6.799E-01	38.60
	1155.19	------	1.63	1.422E+00	------	Line Not Found	------
	1238.11	49	5.79	1.338E+00	8.921E-01	8.922E-01	67.78
	1280.96	------	1.43	1.300E+00	------	Line Not Found	------
	1377.67	35	4.00	1.222E+00	1.019E+00	1.019E+00	56.89
	1401.50	------	1.27	1.206E+00	------	Line Not Found	------
	1407.98	------	2.15	1.201E+00	------	Line Not Found	------
	1509.23	------	2.11	1.136E+00	------	Line Not Found	------
	1729.60	23	2.92	1.029E+00	1.110E+00	1.110E+00	75.25
	1764.49	78	15.40	1.015E+00	7.125E-01	7.126E-01	32.68
PB-214	74.81	367	6.44	6.454E+00	1.257E+00	1.257E+00	23.31
	77.11	613	10.80	6.621E+00	1.221E+00	1.221E+00	15.86
	87.30	157	4.84	7.132E+00	6.466E-01	6.467E-01	50.13

Sample ID : G198701046 Acquisition date : 17-DEC-2007 12:03:45

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	301	7.43	5.149E+00	1.122E+00	1.122E+00	35.07
	295.22	332	19.30	4.456E+00	5.495E-01	5.496E-01	18.46
	351.93	610	37.60*	3.903E+00	5.919E-01	5.919E-01	15.76
RA-223	269.46	138	13.70*	4.753E+00	3.014E-01	3.014E-01	43.71
AC-228	129.07	37	2.42	7.222E+00	2.990E-01	2.990E-01	194.02
	209.25	116	3.89	5.667E+00	7.498E-01	7.498E-01	61.72
	270.25	138	3.46	4.753E+00	1.194E+00	1.194E+00	43.71
	338.32	211	11.27	4.021E+00	6.625E-01	6.625E-01	32.59
	409.46	54	1.92	3.466E+00	1.155E+00	1.155E+00	87.79
	463.00	86	4.40	3.141E+00	8.898E-01	8.898E-01	61.59
	794.95	53	4.25	1.984E+00	8.907E-01	8.907E-01	65.54
	911.20	246	25.80*	1.756E+00	7.734E-01	7.734E-01	18.91
	964.77	65	4.99	1.668E+00	1.109E+00	1.109E+00	42.48
	968.97	175	15.80	1.661E+00	9.512E-01	9.512E-01	19.94
	1588.20	23	3.22	1.093E+00	9.318E-01	9.318E-01	75.67
TH-234	63.29	71	4.80	5.271E+00	4.009E-01	4.009E-01	116.24
	92.58	261	5.41*	7.298E+00	9.400E-01	9.400E-01	38.23
U-235	143.76	32	10.96*	6.947E+00	6.072E-02	6.072E-02	215.52
NP-236	98.44	68	38.00*	7.404E+00	3.426E-02	3.426E-02	101.15
NP-237	86.48	157	12.40*	7.132E+00	2.524E-01	2.524E-01	50.13
AM-243	74.66	367	68.20*	6.454E+00	1.187E-01	1.187E-01	23.31

Flag: "*" = Keyline

Sample ID : G198701046 Acquisition date : 17-DEC-2007 12:03:45

Total number of lines in spectrum 71
Number of unidentified lines 32
Number of lines tentatively identified by NID 39 54.93%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.887E+00	5.887E+00	0.699E+00	11.88	
CS-137	9.47E+08S	1.01	9.441E-02	9.490E-02	3.007E-02	31.68	
TL-208	4.43E+17S	1.00	1.939E-01	1.939E-01	0.398E-01	20.53	
BI-212	4.43E+17S	1.00	4.565E-01	4.565E-01	2.229E-01	48.84	
PB-212	4.43E+17S	1.00	7.418E-01	7.418E-01	0.733E-01	9.88	
BI-214	5.05E+10S	1.00	5.173E-01	5.173E-01	0.926E-01	17.91	
PB-214	5.05E+10S	1.00	5.919E-01	5.919E-01	0.933E-01	15.76	
RA-223	1.04E+12S	1.00	3.014E-01	3.014E-01	1.318E-01	43.71	
AC-228	4.43E+17S	1.00	7.734E-01	7.734E-01	1.463E-01	18.91	
TH-234	1.41E+17S	1.00	9.400E-01	9.400E-01	3.593E-01	38.23	
U-235	2.22E+16S	1.00	6.072E-02	6.072E-02	13.09E-02	215.52	
NP-236	4.89E+12S	1.00	3.426E-02	3.426E-02	3.466E-02	101.15	
NP-237	6.75E+13S	1.00	2.524E-01	2.524E-01	1.265E-01	50.13	
AM-243	2.33E+11S	1.00	1.187E-01	1.187E-01	0.277E-01	23.31	
			---	---			
	Total Activity :		1.096E+01	1.096E+01			

Grand Total Activity : 1.096E+01 1.096E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701046 Acquisition date : 17-DEC-2007 12:03:45

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.31	73	430	1.59	168.11	165	7	5.08E-03	****	7.01E+00	
0	90.23	92	384	0.97	179.95	177	6	6.39E-03	70.7	7.23E+00	
0	154.30	16	412	0.64	308.05	305	9	1.14E-03	****	6.75E+00	
0	185.97	217	396	1.44	371.38	365	12	1.51E-02	42.0	6.11E+00	
0	306.98	74	147	3.39	613.32	609	10	5.12E-03	65.8	4.33E+00	
0	328.42	52	229	1.42	656.19	651	10	3.63E-03	****	4.12E+00	
0	360.77	31	81	0.83	720.89	718	6	2.18E-03	97.3	3.83E+00	
0	402.15	37	77	1.06	803.61	800	7	2.60E-03	84.8	3.52E+00	
0	404.96	27	91	1.41	809.24	806	8	1.89E-03	****	3.50E+00	
0	502.91	19	102	0.50	1005.09	999	11	1.32E-03	****	2.94E+00	
1	766.59	34	35	1.83	1532.32	1520	29	2.37E-03	84.5	2.05E+00	
1	772.80	37	31	1.84	1544.75	1520	29	2.56E-03	63.1	2.03E+00	
1	941.14	28	20	1.95	1881.35	1878	24	1.94E-03	60.9	1.71E+00	
1	948.14	24	30	1.95	1895.36	1878	24	1.68E-03	****	1.70E+00	
0	1003.44	40	37	5.99	2005.92	1995	22	2.77E-03	96.3	1.61E+00	
0	1060.88	12	25	1.59	2120.80	2116	7	8.43E-04	****	1.53E+00	
0	1094.45	20	20	0.90	2187.91	2184	7	1.36E-03	89.6	1.49E+00	
0	1112.37	29	44	3.89	2223.76	2216	14	1.99E-03	****	1.47E+00	
0	1148.87	23	24	0.68	2296.74	2289	13	1.56E-03	****	1.43E+00	
0	1181.70	51	58	10.29	2362.39	2349	26	3.55E-03	86.6	1.39E+00	
0	1338.84	26	20	2.48	2676.62	2668	17	1.83E-03	88.5	1.25E+00	
0	1346.27	12	14	3.87	2691.49	2685	13	8.36E-04	****	1.25E+00	
0	1387.24	34	13	3.14	2773.42	2763	19	2.36E-03	63.1	1.22E+00	
0	1512.37	30	30	0.57	3023.65	3014	17	2.05E-03	96.8	1.13E+00	
0	1540.18	7	21	3.20	3079.26	3070	14	4.71E-04	****	1.12E+00	
0	1580.29	26	6	2.66	3159.46	3152	14	1.78E-03	58.6	1.10E+00	
0	1604.95	7	16	0.56	3208.79	3201	10	4.63E-04	****	1.08E+00	
0	1721.57	16	15	4.95	3442.00	3426	18	1.08E-03	****	1.03E+00	
0	1813.04	10	6	1.25	3624.92	3620	10	7.27E-04	****	9.98E-01	
0	1928.76	7	6	0.57	3856.35	3851	9	4.62E-04	****	9.63E-01	
0	1934.66	9	3	1.37	3868.15	3864	10	6.28E-04	94.5	9.61E-01	
0	1963.01	8	12	5.00	3924.85	3916	15	5.83E-04	****	9.53E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701046            *
* Acquisition date : 17-DEC-2007 12:03:45 Detector SN#    :                 *
* Detector ID      : GAM07                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:27.38     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701046           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.3180E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 31-OCT-2007 13:07:28 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.887E+00	6.852E-01	1.374E-01	6.852E-01
CS-137	9.490E-02	2.946E-02	1.345E-02	2.946E-02
TL-208	1.939E-01	3.903E-02	1.424E-02	3.903E-02
BI-212	4.565E-01	2.185E-01	1.074E-01	2.185E-01
PB-212	7.418E-01	7.185E-02	2.244E-02	7.185E-02
BI-214	5.173E-01	9.079E-02	2.909E-02	9.079E-02
PB-214	5.919E-01	9.142E-02	2.824E-02	9.142E-02
RA-223	3.014E-01	1.291E-01	7.258E-02	1.291E-01
AC-228	7.734E-01	1.433E-01	5.079E-02	1.433E-01
TH-234	9.400E-01	3.521E-01	1.617E-01	3.521E-01
U-235	6.072E-02	1.282E-01	7.624E-02	1.282E-01
NP-236	3.426E-02	3.397E-02	2.172E-02	3.397E-02
NP-237	2.524E-01	1.240E-01	7.417E-02	1.240E-01
AM-243	1.187E-01	2.711E-02	1.668E-02	2.711E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	7.343E-03	2.345E-02	1.800E-02	2.345E-02	NOT IDENT.
RH-101	1.180E-02	1.702E-02	1.482E-02	1.702E-02	NOT IDENT.
SB-125	-1.478E-02	4.500E-02	3.716E-02	4.500E-02	NOT IDENT.
EU-155	4.866E-03	5.004E-02	4.168E-02	5.004E-02	NOT IDENT.
PO-209	-1.332E+00	4.204E+00	3.296E+00	4.204E+00	NOT IDENT.
BI-211	-1.673E-01	5.286E-01	4.338E-01	5.286E-01	NOT IDENT.
PA-233	1.455E-02	3.520E-02	2.758E-02	3.520E-02	NOT IDENT.
PA-234M	-1.182E+00	2.626E+00	1.844E+00	2.626E+00	NOT IDENT.
NP-239	-6.301E-02	1.052E-01	9.085E-02	1.052E-01	NOT IDENT.
AM-241	-1.135E-02	4.663E-02	3.699E-02	4.663E-02	NOT IDENT.
CM-243	1.080E-02	4.627E-02	3.632E-02	4.627E-02	NOT IDENT.
AM-246	4.361E-02	6.473E-02	5.910E-02	6.473E-02	NOT IDENT.
CF-249	-4.587E-03	1.982E-02	1.665E-02	1.982E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	340.3024
63.29	351.5276
74.66	440.5615
74.81	440.6996
74.81	440.6996
77.11	442.7819
77.11	442.7819
86.48	352.6587
87.30	408.0093
87.30	408.0093
92.58	336.6537
98.44	308.5645
103.76	304.0471
105.31	306.9236
129.07	315.0804
143.76	284.4034
198.00	254.5518
209.25	258.4578
228.18	259.7021
238.63	217.9568
242.00	218.6374
269.46	192.8936
270.25	191.5040
277.36	190.0333
295.22	181.5214
300.09	160.9386
312.17	161.9333
338.32	179.3360
351.93	148.7092
387.59	145.0800
409.46	109.2892
427.87	116.9102
463.00	98.7314
510.77	103.1011
583.19	85.9274
609.31	99.1447
661.66	62.2324
727.33	65.5973
763.13	62.8677
768.36	62.9939
785.37	74.4733
794.95	49.4917
806.17	69.9821
831.80	73.7121
860.56	53.7824
896.60	68.0691
911.20	47.3577
934.06	49.4854
964.77	39.6269
968.97	39.6802
1001.03	44.4153
1078.86	42.5111
1120.29	47.1352
1155.19	48.1632
1173.23	47.1837
1238.11	46.3516
1280.96	38.0780
1332.51	33.9076
1377.67	30.8534
1401.50	28.1549
1407.98	49.3469
1460.80	26.5057
1509.23	28.2667
1588.20	33.5482
1620.50	20.0545
1729.60	12.9497
1764.49	9.7789

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701046

Total Uranium Activity	2.8095E-02	ug/g
Total Uranium Counting Unc.	5.9341E-02	ug/g
Total Uranium Tpu	5.9341E-08	ug/g
Total Uranium Mda	3.5276E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:05:45.06

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701047.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:04:17
Sample ID        : G198701047           Sample quantity  : 1.15060E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.27  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	62.92*	61	598	1.17	125.29	122	8	4.23E-03	76.6	
2	2	74.66*	452	651	1.12	148.75	143	16	3.14E-02	11.0	6.88E-01
3	2	76.89*	799	595	1.18	153.22	143	16	5.55E-02	6.6	
4	4	83.83*	84	888	1.67	167.08	162	29	5.86E-03	66.4	1.80E+00
5	4	87.08	315	578	1.19	173.57	162	29	2.19E-02	13.7	
6	4	89.80	198	462	1.07	179.02	162	29	1.37E-02	18.7	
7	4	92.52*	375	632	1.48	184.45	162	29	2.60E-02	15.8	
8	0	105.40	106	433	1.27	210.21	207	7	7.36E-03	34.0	
9	0	129.93	162	803	2.52	259.25	251	14	1.13E-02	38.0	
10	0	139.52*	34	480	0.97	278.41	275	8	2.38E-03	119.6	
11	0	144.15*	95	540	1.59	287.66	283	9	6.60E-03	47.4	
12	0	153.74	32	395	0.63	306.84	304	7	2.20E-03	105.8	
13	0	158.85*	26	462	2.92	317.05	312	9	1.80E-03	159.9	
14	0	162.77*	9	383	0.85	324.88	322	7	6.37E-04	378.1	
15	0	169.06	20	550	0.40	337.47	332	10	1.41E-03	217.2	
16	0	185.55*	313	576	1.32	370.44	365	11	2.17E-02	17.6	
17	0	209.12	239	506	1.52	417.55	413	11	1.66E-02	19.3	
18	3	238.44*	2060	303	1.34	476.16	468	23	1.43E-01	2.8	3.44E+00
19	3	241.48	433	418	2.01	482.23	468	23	3.01E-02	14.2	
20	0	270.10*	92	501	1.66	539.45	534	14	6.37E-03	56.1	
21	0	277.69	70	288	1.24	554.63	551	9	4.83E-03	46.0	
22	0	295.05*	497	375	1.32	589.34	584	11	3.45E-02	9.2	
23	0	300.12*	86	384	1.76	599.48	595	12	5.94E-03	50.1	
24	0	309.55	25	421	2.19	618.34	613	16	1.72E-03	186.3	
25	0	328.12	181	302	2.16	655.46	649	13	1.25E-02	21.2	
26	0	332.62	20	187	0.83	664.46	661	7	1.42E-03	112.9	
27	0	338.45*	438	280	1.59	676.12	671	13	3.04E-02	9.8	
28	0	351.55*	990	289	1.58	702.30	694	15	6.88E-02	5.1	
29	0	408.77	23	236	1.14	816.71	813	10	1.61E-03	126.2	
30	0	462.84*	134	170	1.56	924.83	919	10	9.29E-03	21.9	
31	0	510.66*	208	314	2.36	1020.44	1012	18	1.44E-02	26.7	
32	0	526.67	69	175	5.37	1052.45	1046	15	4.79E-03	43.7	
33	0	564.16	21	169	2.61	1127.43	1117	12	1.44E-03	127.7	
34	0	582.88*	679	161	1.74	1164.86	1158	14	4.71E-02	5.8	
35	0	609.02*	663	195	1.60	1217.13	1210	15	4.61E-02	6.5	
36	0	668.66*	174	278	9.56	1336.39	1319	34	1.21E-02	31.0	
37	0	726.68	179	112	1.65	1452.43	1447	12	1.24E-02	14.0	
38	0	753.50	44	157	5.95	1506.06	1494	17	3.07E-03	66.6	

Sample ID : G198701047 Acquisition date : 17-DEC-2007 12:04:17

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	767.52	48	151	2.73	1534.09	1529	11	3.30E-03	52.2	
40	0	786.21	51	146	2.27	1571.48	1564	14	3.52E-03	53.5	
41	0	794.70	61	174	1.83	1588.46	1582	16	4.24E-03	50.2	
42	0	860.94	182	104	2.64	1720.93	1711	23	1.26E-02	16.3	
43	0	884.46	25	66	1.51	1767.99	1762	9	1.75E-03	62.5	
44	0	910.95*	495	115	1.74	1820.96	1813	16	3.44E-02	7.0	
45	3	933.75	41	41	2.10	1866.56	1863	17	2.87E-03	31.0	1.25E+00
46	3	938.34	34	54	2.40	1875.75	1863	17	2.38E-03	38.8	
47	3	964.56	133	87	3.06	1928.20	1922	21	9.22E-03	16.2	5.47E-01
48	3	968.79*	273	73	2.14	1936.65	1922	21	1.90E-02	9.9	
49	0	988.37	57	175	4.34	1975.82	1961	30	3.94E-03	68.8	
50	0	1120.19	178	139	2.45	2239.51	2228	23	1.24E-02	18.7	
51	0	1237.87	58	96	1.83	2474.91	2465	16	4.03E-03	40.0	
52	0	1247.93	39	105	3.45	2495.04	2487	18	2.71E-03	63.2	
53	0	1297.97	21	66	1.93	2595.16	2588	14	1.45E-03	85.4	
54	0	1325.56	51	37	4.14	2650.35	2642	19	3.57E-03	31.9	
55	0	1376.95	76	70	0.97	2753.16	2743	20	5.30E-03	29.2	
56	0	1434.76	27	41	4.61	2868.83	2861	15	1.88E-03	55.1	
57	0	1460.53*	825	84	3.04	2920.39	2911	21	5.73E-02	4.7	
58	0	1495.08	25	42	1.23	2989.52	2978	18	1.75E-03	65.2	
59	0	1620.44	21	32	1.11	3240.36	3234	14	1.48E-03	59.8	
60	0	1730.72	77	20	0.74	3461.04	3450	26	5.34E-03	19.5	
61	0	1764.26*	141	29	3.44	3528.17	3518	19	9.81E-03	13.4	
62	0	1857.39	22	10	3.04	3714.56	3707	14	1.50E-03	38.5	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701047       *
* Acquisition date : 17-DEC-2007 12:04:17 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.27     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701047           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1506E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	6.323E+00	6.852E-01	2.682E-01	0.000E+00
EU-155	9.197E-02	6.170E-02	9.181E-02	0.000E+00
TL-208	3.105E-01	4.258E-02	2.839E-02	0.000E+00
BI-212	6.934E-01	2.001E-01	2.105E-01	0.000E+00
PB-212	1.066E+00	8.631E-02	4.847E-02	0.000E+00
BI-214	5.748E-01	8.647E-02	5.456E-02	0.000E+00
PB-214	7.327E-01	8.387E-02	5.526E-02	0.000E+00
RA-223	1.605E-01	1.766E-01	1.494E-01	0.000E+00
AC-228	1.064E+00	1.785E-01	1.022E-01	0.000E+00
TH-234	1.306E+00	4.179E-01	3.798E-01	0.000E+00
U-235	1.565E-01	1.456E-01	1.712E-01	0.000E+00
NP-237	5.009E-01	1.408E-01	1.730E-01	0.000E+00
AM-243	1.552E-01	3.550E-02	4.128E-02	0.000E+00
CM-243	8.265E-02	5.544E-02	8.073E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-6.000E-03		1.925E-02	3.104E-02	0.000E+00	NOT IDENT.
RH-101	-6.441E-03		2.037E-02	3.130E-02	0.000E+00	NOT IDENT.
SB-125	3.142E-03		4.634E-02	7.743E-02	0.000E+00	NOT IDENT.
CS-137	-5.664E-03		2.023E-02	2.842E-02	0.000E+00	NOT IDENT.
PO-209	2.539E+00		3.216E+00	5.716E+00	0.000E+00	NOT IDENT.
BI-211	-3.809E-01		4.996E-01	8.133E-01	0.000E+00	NOT IDENT.
PA-233	-4.394E-03		3.127E-02	5.314E-02	0.000E+00	NOT IDENT.
PA-234M	9.564E-01		2.555E+00	3.889E+00	0.000E+00	NOT IDENT.
NP-236	4.018E-02		3.263E-02	5.247E-02	0.000E+00	NOT IDENT.
NP-239	-8.229E-02		1.198E-01	1.931E-01	0.000E+00	NOT IDENT.
AM-241	3.407E-02		7.279E-02	1.082E-01	0.000E+00	NOT IDENT.
AM-246	-1.031E-02		6.044E-02	9.934E-02	0.000E+00	NOT IDENT.
CF-249	4.666E-03		1.981E-02	3.361E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:05:46.05

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701047.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:04:17
Sample ID        : G198701047           Sample quantity  : 1.15060E+02 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.27  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	825	10.66*	1.996E+00	6.323E+00	6.323E+00	11.06
EU-155	105.31	106	21.20*	9.147E+00	8.919E-02	9.197E-02	68.45
TL-208	277.36	70	6.31	6.704E+00	2.681E-01	2.681E-01	92.13
	510.77	208	22.60	4.632E+00	3.235E-01	3.235E-01	53.77
	583.19	679	84.50*	4.219E+00	3.105E-01	3.105E-01	13.99
	763.13	------	1.81	3.420E+00	------	Line Not Found	------
	860.56	182	12.42	3.090E+00	7.714E-01	7.714E-01	34.15
BI-212	727.33	179	11.80*	3.560E+00	6.934E-01	6.934E-01	29.44
	785.37	51	1.10	3.337E+00	2.255E+00	2.255E+00	107.34
	1620.50	21	1.49	1.873E+00	1.248E+00	1.248E+00	119.78
PB-212	74.81	452	10.40	6.961E+00	1.018E+00	1.018E+00	23.34
	77.11	799	17.50	7.254E+00	1.026E+00	1.026E+00	15.42
	87.30	315	7.81	8.282E+00	7.953E-01	7.953E-01	28.69
	238.63	2060	43.30*	7.278E+00	1.066E+00	1.066E+00	8.26
	300.09	86	3.28	6.421E+00	6.628E-01	6.628E-01	100.28
BI-214	609.31	663	46.10*	4.085E+00	5.748E-01	5.748E-01	15.35
	768.36	48	4.94	3.404E+00	4.610E-01	4.610E-01	104.78
	806.17	------	1.22	3.268E+00	------	Line Not Found	------
	934.06	41	3.03	2.881E+00	7.727E-01	7.727E-01	62.79
	1120.29	178	15.10	2.460E+00	7.829E-01	7.830E-01	38.07
	1155.19	------	1.63	2.397E+00	------	Line Not Found	------
	1238.11	58	5.79	2.263E+00	7.222E-01	7.223E-01	80.22
	1280.96	------	1.43	2.201E+00	------	Line Not Found	------
	1377.67	76	4.00	2.082E+00	1.495E+00	1.495E+00	58.66
	1401.50	------	1.27	2.055E+00	------	Line Not Found	------
	1407.98	------	2.15	2.048E+00	------	Line Not Found	------
	1509.23	------	2.11	1.953E+00	------	Line Not Found	------
	1729.60	77	2.92	1.815E+00	2.365E+00	2.365E+00	39.35
	1764.49	141	15.40	1.801E+00	8.308E-01	8.308E-01	27.37
PB-214	74.81	452	6.44	6.961E+00	1.644E+00	1.644E+00	23.34
	77.11	799	10.80	7.254E+00	1.663E+00	1.663E+00	15.42
	87.30	315	4.84	8.282E+00	1.283E+00	1.283E+00	28.69

Sample ID : G198701047 Acquisition date : 17-DEC-2007 12:04:17

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	433	7.43	7.230E+00	1.315E+00	1.315E+00	29.01
	295.22	497	19.30	6.482E+00	6.484E-01	6.485E-01	19.39
	351.93	990	37.60*	5.863E+00	7.326E-01	7.327E-01	11.68
RA-223	269.46	92	13.70*	6.807E+00	1.605E-01	1.605E-01	112.29
AC-228	129.07	162	2.42	9.230E+00	1.186E+00	1.186E+00	76.27
	209.25	239	3.89	7.783E+00	1.290E+00	1.290E+00	39.13
	270.25	92	3.46	6.807E+00	6.356E-01	6.356E-01	112.29
	338.32	438	11.27	5.994E+00	1.058E+00	1.058E+00	20.38
	409.46	23	1.92	5.353E+00	3.673E-01	3.673E-01	252.45
	463.00	134	4.40	4.947E+00	1.002E+00	1.002E+00	44.20
	794.95	61	4.25	3.307E+00	7.088E-01	7.088E-01	100.80
	911.20	495	25.80*	2.944E+00	1.064E+00	1.064E+00	17.11
	964.77	133	4.99	2.801E+00	1.550E+00	1.550E+00	33.63
	968.97	273	15.80	2.790E+00	1.011E+00	1.011E+00	21.95
	1588.20	------	3.22	1.894E+00	------	Line Not Found	------
TH-234	63.29	61	4.80	5.009E+00	4.128E-01	4.128E-01	153.33
	92.58	375	5.41*	8.650E+00	1.306E+00	1.306E+00	32.65
U-235	143.76	95	10.96*	9.038E+00	1.565E-01	1.565E-01	94.91
NP-237	86.48	315	12.40*	8.282E+00	5.009E-01	5.009E-01	28.69
AM-243	74.66	452	68.20*	6.961E+00	1.552E-01	1.552E-01	23.34
CM-243	103.76	106	23.00*	9.147E+00	8.221E-02	8.265E-02	68.45

Flag: "*" = Keyline

Sample ID : G198701047 Acquisition date : 17-DEC-2007 12:04:17

Total number of lines in spectrum 62
Number of unidentified lines 24
Number of lines tentatively identified by NID 38 61.29%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	6.323E+00	6.323E+00	0.699E+00	11.06	
EU-155	1.57E+08S	1.03	8.919E-02	9.197E-02	6.295E-02	68.45	
TL-208	4.43E+17S	1.00	3.105E-01	3.105E-01	0.434E-01	13.99	
BI-212	4.43E+17S	1.00	6.934E-01	6.934E-01	2.041E-01	29.44	
PB-212	4.43E+17S	1.00	1.066E+00	1.066E+00	0.088E+00	8.26	
BI-214	5.05E+10S	1.00	5.748E-01	5.748E-01	0.882E-01	15.35	
PB-214	5.05E+10S	1.00	7.326E-01	7.327E-01	0.856E-01	11.68	
RA-223	1.04E+12S	1.00	1.605E-01	1.605E-01	1.802E-01	112.29	
AC-228	4.43E+17S	1.00	1.064E+00	1.064E+00	0.182E+00	17.11	
TH-234	1.41E+17S	1.00	1.306E+00	1.306E+00	0.426E+00	32.65	
U-235	2.22E+16S	1.00	1.565E-01	1.565E-01	1.486E-01	94.91	
NP-237	6.75E+13S	1.00	5.009E-01	5.009E-01	1.437E-01	28.69	
AM-243	2.33E+11S	1.00	1.552E-01	1.552E-01	0.362E-01	23.34	
CM-243	8.99E+08S	1.01	8.221E-02	8.265E-02	5.657E-02	68.45	
			---	---			
	Total Activity :		1.322E+01	1.322E+01			

Grand Total Activity : 1.322E+01 1.322E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701047 Acquisition date : 17-DEC-2007 12:04:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	83.83	84	888	1.67	167.08	162	29	5.86E-03	****	8.01E+00	
4	89.80	198	462	1.07	179.02	162	29	1.37E-02	37.4	8.48E+00	
0	139.52	34	480	0.97	278.41	275	8	2.38E-03	****	9.11E+00	
0	153.74	32	395	0.63	306.84	304	7	2.20E-03	****	8.87E+00	
0	158.85	26	462	2.92	317.05	312	9	1.80E-03	****	8.77E+00	
0	162.77	9	383	0.85	324.88	322	7	6.37E-04	****	8.69E+00	
0	169.06	20	550	0.40	337.47	332	10	1.41E-03	****	8.57E+00	
0	185.55	313	576	1.32	370.44	365	11	2.17E-02	35.2	8.24E+00	
0	309.55	25	421	2.19	618.34	613	16	1.72E-03	****	6.31E+00	
0	328.12	181	302	2.16	655.46	649	13	1.25E-02	42.4	6.10E+00	
0	332.62	20	187	0.83	664.46	661	7	1.42E-03	****	6.06E+00	
0	526.67	69	175	5.37	1052.45	1046	15	4.79E-03	87.3	4.53E+00	
0	564.16	21	169	2.61	1127.43	1117	12	1.44E-03	****	4.32E+00	
0	668.66	174	278	9.56	1336.39	1319	34	1.21E-02	61.9	3.80E+00	
0	753.50	44	157	5.95	1506.06	1494	17	3.07E-03	****	3.46E+00	
0	884.46	25	66	1.51	1767.99	1762	9	1.75E-03	****	3.02E+00	
3	938.34	34	54	2.40	1875.75	1863	17	2.38E-03	77.6	2.87E+00	
0	988.37	57	175	4.34	1975.82	1961	30	3.94E-03	****	2.74E+00	
0	1247.93	39	105	3.45	2495.04	2487	18	2.71E-03	****	2.25E+00	
0	1297.97	21	66	1.93	2595.16	2588	14	1.45E-03	****	2.18E+00	
0	1325.56	51	37	4.14	2650.35	2642	19	3.57E-03	63.8	2.14E+00	
0	1434.76	27	41	4.61	2868.83	2861	15	1.88E-03	****	2.02E+00	
0	1495.08	25	42	1.23	2989.52	2978	18	1.75E-03	****	1.97E+00	
0	1857.39	22	10	3.04	3714.56	3707	14	1.50E-03	77.0	1.77E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701047            *
* Acquisition date : 17-DEC-2007 12:04:17 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:02.27     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701047           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1506E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	6.323E+00	6.852E-01	1.342E-01	6.852E-01
EU-155	9.197E-02	6.170E-02	4.593E-02	6.170E-02
TL-208	3.105E-01	4.258E-02	1.420E-02	4.258E-02
BI-212	6.934E-01	2.001E-01	1.053E-01	2.001E-01
PB-212	1.066E+00	8.631E-02	2.425E-02	8.631E-02
BI-214	5.748E-01	8.647E-02	2.730E-02	8.647E-02
PB-214	7.327E-01	8.387E-02	2.765E-02	8.387E-02
RA-223	1.605E-01	1.766E-01	7.476E-02	1.766E-01
AC-228	1.064E+00	1.785E-01	5.111E-02	1.785E-01
TH-234	1.306E+00	4.179E-01	1.900E-01	4.179E-01
U-235	1.565E-01	1.456E-01	8.566E-02	1.456E-01
NP-237	5.009E-01	1.408E-01	8.657E-02	1.408E-01
AM-243	1.552E-01	3.550E-02	2.065E-02	3.550E-02
CM-243	8.265E-02	5.544E-02	4.039E-02	5.544E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-6.000E-03	1.925E-02	1.553E-02	1.925E-02	NOT IDENT.
RH-101	-6.441E-03	2.037E-02	1.566E-02	2.037E-02	NOT IDENT.
SB-125	3.142E-03	4.634E-02	3.874E-02	4.634E-02	NOT IDENT.
CS-137	-5.664E-03	2.023E-02	1.422E-02	2.023E-02	NOT IDENT.
PO-209	2.539E+00	3.216E+00	2.860E+00	3.216E+00	NOT IDENT.
BI-211	-3.809E-01	4.996E-01	4.069E-01	4.996E-01	NOT IDENT.
PA-233	-4.394E-03	3.127E-02	2.659E-02	3.127E-02	NOT IDENT.
PA-234M	9.564E-01	2.555E+00	1.946E+00	2.555E+00	NOT IDENT.
NP-236	4.018E-02	3.263E-02	2.625E-02	3.263E-02	NOT IDENT.
NP-239	-8.229E-02	1.198E-01	9.659E-02	1.198E-01	NOT IDENT.
AM-241	3.407E-02	7.279E-02	5.415E-02	7.279E-02	NOT IDENT.
AM-246	-1.031E-02	6.044E-02	4.970E-02	6.044E-02	NOT IDENT.
CF-249	4.666E-03	1.981E-02	1.682E-02	1.981E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	412.5221
63.29	518.1697
74.66	635.8326
74.81	636.0769
74.81	636.0769
77.11	639.8110
77.11	639.8110
86.48	518.2978
87.30	519.2828
87.30	519.2828
92.58	525.5239
98.44	427.3599
103.76	471.2707
105.31	496.4702
129.07	461.0079
143.76	482.8449
198.00	454.8347
209.25	456.9109
228.18	444.9982
238.63	394.4272
242.00	395.8922
269.46	330.2514
270.25	330.5157
277.36	314.1075
295.22	316.3668
300.09	287.4646
312.17	288.7130
338.32	266.3683
351.93	252.6060
387.59	246.3958
409.46	229.4661
427.87	217.6348
463.00	195.7039
510.77	199.8304
583.19	176.2018
609.31	181.6453
661.66	158.1582
727.33	134.9052
763.13	151.1930
768.36	162.9485
785.37	147.1317
794.95	140.8990
806.17	132.0401
831.80	150.9403
860.56	105.2704
896.60	89.4418
911.20	104.4442
934.06	98.9972
964.77	112.4374
968.97	105.4450
1001.03	89.5109
1078.86	90.2467
1120.29	98.7275
1155.19	96.6558
1173.23	97.1917
1238.11	86.6936
1280.96	70.5922
1332.51	56.7689
1377.67	72.4779
1401.50	71.9485
1407.98	62.1964
1460.80	57.0383
1509.23	53.6745
1588.20	53.6663
1620.50	46.7908
1729.60	44.5100
1764.49	46.3720

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701047

Total Uranium Activity	7.2423E-02	ug/g
Total Uranium Counting Unc.	6.7362E-02	ug/g
Total Uranium Tpu	6.7362E-08	ug/g
Total Uranium Mda	3.9637E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:06:24.22

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701048.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:04:40
Sample ID        : G198701048           Sample quantity  : 1.02920E+02 GRAM
Detector name    : GAM14                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.55  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.55*	2	297	1.67	93.07	90	8	1.15E-04	*****	
2	0	63.27*	32	413	1.30	126.51	123	9	2.19E-03	132.4	
3	4	75.15*	402	558	2.03	150.26	142	21	2.79E-02	14.4	2.41E+00
4	4	77.29*	479	456	1.46	154.53	142	21	3.32E-02	10.2	
5	1	87.17*	192	375	1.54	174.28	171	20	1.33E-02	18.9	3.24E+00
6	1	90.17	73	449	1.55	180.28	171	20	5.04E-03	56.0	
7	1	92.96*	71	419	1.55	185.87	171	20	4.93E-03	63.2	
8	0	175.26	119	370	5.21	350.41	343	14	8.23E-03	35.8	
9	0	186.14*	176	349	1.78	372.16	367	11	1.22E-02	23.9	
10	0	209.46	129	313	1.64	418.79	412	11	8.95E-03	28.1	
11	4	238.57*	1046	242	1.61	477.01	471	17	7.26E-02	4.4	4.88E-01
12	4	241.54	219	233	1.71	482.95	471	17	1.52E-02	17.3	
13	0	270.22	50	207	1.12	540.28	534	9	3.49E-03	53.5	
14	0	278.06*	60	162	2.27	555.96	551	10	4.18E-03	44.3	
15	0	289.46	40	173	2.74	578.75	574	10	2.81E-03	63.0	
16	0	294.97	297	246	1.86	589.77	584	13	2.06E-02	12.3	
17	0	300.30	49	188	1.14	600.44	597	9	3.43E-03	52.1	
18	0	328.05	57	171	3.69	655.93	650	10	3.99E-03	44.7	
19	0	338.40*	214	274	2.05	676.63	669	18	1.49E-02	20.0	
20	0	351.80*	477	181	1.53	703.42	698	11	3.32E-02	7.5	
21	0	365.58	37	58	1.27	730.97	728	6	2.55E-03	37.2	
22	0	413.53	29	164	1.48	826.86	822	13	2.04E-03	92.0	
23	0	462.95	47	82	2.32	925.69	921	10	3.25E-03	39.2	
24	0	510.97*	102	130	2.80	1021.73	1014	18	7.06E-03	36.1	
25	0	547.63	23	59	1.44	1095.05	1087	10	1.59E-03	66.7	
26	0	570.00*	82	158	1.93	1139.80	1129	21	5.68E-03	41.8	
27	0	583.37*	277	105	1.71	1166.54	1161	13	1.92E-02	10.3	
28	0	609.46*	341	147	1.87	1218.71	1211	17	2.37E-02	10.1	
29	0	661.69	102	61	1.79	1323.19	1318	11	7.10E-03	17.8	
30	0	727.67	76	48	1.99	1455.17	1450	12	5.25E-03	22.4	
31	0	734.76	32	48	0.91	1469.34	1461	13	2.20E-03	48.7	
32	0	772.67	14	49	0.48	1545.17	1541	8	1.01E-03	87.1	
33	0	797.03	49	76	5.36	1593.91	1585	20	3.42E-03	45.4	
34	0	847.30	50	134	11.42	1694.47	1673	30	3.46E-03	71.0	
35	0	860.98	26	47	1.02	1721.84	1718	9	1.84E-03	51.3	
36	0	911.49*	192	52	1.77	1822.88	1816	15	1.33E-02	11.4	
37	0	969.88	113	63	2.10	1939.69	1934	17	7.82E-03	19.5	
38	1	1014.01	22	4	1.94	2028.00	2025	17	1.50E-03	25.8	2.25E+00

Sample ID : G198701048 Acquisition date : 17-DEC-2007 12:04:40

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	1	1016.51	20	12	1.94	2033.00	2025	17	1.38E-03	45.9	
40	0	1030.94	34	20	5.30	2061.86	2055	14	2.33E-03	33.6	
41	0	1105.10	15	40	6.77	2210.25	2198	17	1.04E-03	102.6	
42	0	1120.52	92	35	2.02	2241.09	2233	17	6.41E-03	17.8	
43	0	1170.30	15	11	1.34	2340.71	2337	7	1.07E-03	43.3	
44	0	1178.92	9	22	0.99	2357.97	2352	8	6.40E-04	98.9	
45	0	1202.04	9	36	0.86	2404.22	2396	13	6.30E-04	140.0	
46	0	1228.21	22	49	7.91	2456.58	2442	20	1.55E-03	80.3	
47	1	1239.02	22	33	2.22	2478.22	2473	25	1.51E-03	52.2	1.57E+00
48	1	1245.61	19	20	2.22	2491.40	2473	25	1.33E-03	61.4	
49	0	1266.78	36	55	10.78	2533.78	2515	28	2.51E-03	60.9	
50	0	1409.56	11	24	1.43	2819.52	2813	13	7.84E-04	92.5	
51	0	1419.82	10	19	0.59	2840.05	2834	12	7.26E-04	87.2	
52	0	1443.81	11	23	3.91	2888.07	2880	13	7.48E-04	96.5	
53	0	1454.63	10	11	0.62	2909.72	2901	12	6.98E-04	75.1	
54	0	1461.45*	248	36	2.17	2923.37	2917	13	1.72E-02	8.6	
55	0	1765.00	76	9	2.80	3530.98	3523	13	5.27E-03	14.2	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                                DETECTOR DATA                              *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701048       *
* Acquisition date : 17-DEC-2007 12:04:40 Detector SN#    :                 *
* Detector ID      : GAM14                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.55     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701048           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0292E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-MAR-2007 18:40:51 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.449E+00	6.094E-01	3.003E-01	0.000E+00
CS-137	8.796E-02	3.134E-02	3.478E-02	0.000E+00
TL-208	2.139E-01	4.581E-02	3.217E-02	0.000E+00
BI-212	5.081E-01	2.266E-01	2.751E-01	0.000E+00
PB-212	7.803E-01	8.307E-02	5.419E-02	0.000E+00
BI-214	5.009E-01	1.057E-01	6.609E-02	0.000E+00
PB-214	5.478E-01	8.637E-02	6.791E-02	0.000E+00
RA-223	1.295E-01	1.361E-01	1.733E-01	0.000E+00
AC-228	7.255E-01	1.733E-01	1.285E-01	0.000E+00
TH-234	3.123E-01	3.879E-01	4.398E-01	0.000E+00
NP-237	3.827E-01	1.450E-01	2.133E-01	0.000E+00
AM-243	1.670E-01	4.870E-02	4.155E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-1.168E-02		4.752E-02	3.907E-02	0.000E+00	NOT IDENT.
RH-101	-2.032E-02		2.201E-02	3.170E-02	0.000E+00	NOT IDENT.
SB-125	-2.355E-02		5.586E-02	9.088E-02	0.000E+00	NOT IDENT.
EU-155	1.156E-02		5.626E-02	9.381E-02	0.000E+00	NOT IDENT.
PO-209	1.860E-01		4.126E+00	7.007E+00	0.000E+00	NOT IDENT.
BI-211	2.258E-01		6.534E-01	1.064E+00	0.000E+00	NOT IDENT.
PA-233	-1.986E-02		3.635E-02	5.970E-02	0.000E+00	NOT IDENT.
PA-234M	-4.342E-01		2.698E+00	4.374E+00	0.000E+00	NOT IDENT.
U-235	4.774E-02		1.227E-01	1.934E-01	0.000E+00	NOT IDENT.
NP-236	-1.227E-02		3.634E-02	5.131E-02	0.000E+00	NOT IDENT.
NP-239	-2.769E-02		1.267E-01	2.147E-01	0.000E+00	NOT IDENT.
AM-241	9.316E-03		7.240E-02	1.070E-01	0.000E+00	NOT IDENT.
CM-243	-5.865E-02		5.121E-02	8.042E-02	0.000E+00	NOT IDENT.
AM-246	6.896E-02		7.246E-02	1.329E-01	0.000E+00	NOT IDENT.
CF-249	1.947E-02		2.180E-02	3.849E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:06:25.30

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701048.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:04:40
Sample ID        : G198701048           Sample quantity  : 1.02920E+02 GRAM
Detector name    : GAM14                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.55  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	248	10.66*	1.229E+00	3.449E+00	3.449E+00	18.03
CS-137	661.66	102	85.10*	2.502E+00	8.751E-02	8.796E-02	36.36
TL-208	277.36	60	6.31	5.053E+00	3.446E-01	3.446E-01	88.90
	510.77	102	22.60	3.128E+00	2.622E-01	2.622E-01	72.42
	583.19	277	84.50*	2.794E+00	2.139E-01	2.139E-01	21.85
	763.13	------	1.81	2.201E+00	------	Line Not Found	------
	860.56	26	12.42	1.970E+00	1.974E-01	1.974E-01	102.93
BI-212	727.33	76	11.80*	2.298E+00	5.081E-01	5.081E-01	45.51
	785.37	------	1.10	2.144E+00	------	Line Not Found	------
	1620.50	------	1.49	1.140E+00	------	Line Not Found	------
PB-212	74.81	402	10.40	6.436E+00	1.095E+00	1.095E+00	29.76
	77.11	479	17.50	6.648E+00	7.503E-01	7.503E-01	21.76
	87.30	192	7.81	7.386E+00	6.076E-01	6.076E-01	38.66
	238.63	1046	43.30*	5.645E+00	7.803E-01	7.803E-01	10.86
	300.09	49	3.28	4.771E+00	5.751E-01	5.751E-01	104.47
BI-214	609.31	341	46.10*	2.690E+00	5.009E-01	5.009E-01	21.53
	768.36	------	4.94	2.187E+00	------	Line Not Found	------
	806.17	------	1.22	2.093E+00	------	Line Not Found	------
	934.06	------	3.03	1.826E+00	------	Line Not Found	------
	1120.29	92	15.10	1.544E+00	7.223E-01	7.223E-01	36.38
	1155.19	------	1.63	1.502E+00	------	Line Not Found	------
	1238.11	22	5.79	1.411E+00	4.847E-01	4.848E-01	104.64
	1280.96	------	1.43	1.371E+00	------	Line Not Found	------
	1377.67	------	4.00	1.289E+00	------	Line Not Found	------
	1401.50	------	1.27	1.271E+00	------	Line Not Found	------
	1407.98	11	2.15	1.265E+00	7.567E-01	7.568E-01	185.05
	1509.23	------	2.11	1.199E+00	------	Line Not Found	------
	1729.60	------	2.92	1.093E+00	------	Line Not Found	------
	1764.49	76	15.40	1.080E+00	8.315E-01	8.315E-01	29.03
PB-214	74.81	402	6.44	6.436E+00	1.768E+00	1.769E+00	29.76
	77.11	479	10.80	6.648E+00	1.216E+00	1.216E+00	21.76
	87.30	192	4.84	7.386E+00	9.805E-01	9.806E-01	38.66

Sample ID : G198701048 Acquisition date : 17-DEC-2007 12:04:40

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	219	7.43	5.595E+00	9.611E-01	9.612E-01	35.22
	295.22	297	19.30	4.836E+00	5.794E-01	5.795E-01	25.42
	351.93	477	37.60*	4.227E+00	5.478E-01	5.478E-01	16.09
RA-223	269.46	50	13.70*	5.161E+00	1.295E-01	1.295E-01	107.24
AC-228	129.07	------	2.42	7.836E+00	------	Line Not Found	------
	209.25	129	3.89	6.169E+00	9.789E-01	9.789E-01	56.56
	270.25	50	3.46	5.161E+00	5.130E-01	5.130E-01	107.24
	338.32	214	11.27	4.356E+00	7.965E-01	7.965E-01	40.48
	409.46	------	1.92	3.750E+00	------	Line Not Found	------
	463.00	47	4.40	3.395E+00	5.708E-01	5.708E-01	78.58
	794.95	------	4.25	2.120E+00	------	Line Not Found	------
	911.20	192	25.80*	1.868E+00	7.255E-01	7.255E-01	24.37
	964.77	------	4.99	1.772E+00	------	Line Not Found	------
	968.97	113	15.80	1.764E+00	7.374E-01	7.374E-01	39.92
	1588.20	------	3.22	1.156E+00	------	Line Not Found	------
TH-234	63.29	32	4.80	4.868E+00	2.464E-01	2.464E-01	264.99
	92.58	71	5.41*	7.657E+00	3.123E-01	3.123E-01	126.74
NP-237	86.48	192	12.40*	7.386E+00	3.827E-01	3.827E-01	38.66
AM-243	74.66	402	68.20*	6.436E+00	1.670E-01	1.670E-01	29.76

Flag: "*" = Keyline

Sample ID : G198701048 Acquisition date : 17-DEC-2007 12:04:40

Total number of lines in spectrum 55
Number of unidentified lines 27
Number of lines tentatively identified by NID 28 50.91%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.449E+00	3.449E+00	0.622E+00	18.03	
CS-137	9.47E+08S	1.01	8.751E-02	8.796E-02	3.198E-02	36.36	
TL-208	4.43E+17S	1.00	2.139E-01	2.139E-01	0.467E-01	21.85	
BI-212	4.43E+17S	1.00	5.081E-01	5.081E-01	2.312E-01	45.51	
PB-212	4.43E+17S	1.00	7.803E-01	7.803E-01	0.848E-01	10.86	
BI-214	5.05E+10S	1.00	5.009E-01	5.009E-01	1.078E-01	21.53	
PB-214	5.05E+10S	1.00	5.478E-01	5.478E-01	0.881E-01	16.09	
RA-223	1.04E+12S	1.00	1.295E-01	1.295E-01	1.389E-01	107.24	
AC-228	4.43E+17S	1.00	7.255E-01	7.255E-01	1.768E-01	24.37	
TH-234	1.41E+17S	1.00	3.123E-01	3.123E-01	3.958E-01	126.74	
NP-237	6.75E+13S	1.00	3.827E-01	3.827E-01	1.480E-01	38.66	
AM-243	2.33E+11S	1.00	1.670E-01	1.670E-01	0.497E-01	29.76	
			---	---			
		Total Activity :	7.804E+00	7.805E+00			
		Grand Total Activity :	7.804E+00	7.805E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701048 Acquisition date : 17-DEC-2007 12:04:40

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.55	2	297	1.67	93.07	90	8	1.15E-04	****	1.90E+00	
1	90.17	73	449	1.55	180.28	171	20	5.04E-03	****	7.54E+00	
0	175.26	119	370	5.21	350.41	343	14	8.23E-03	71.6	6.88E+00	
0	186.14	176	349	1.78	372.16	367	11	1.22E-02	47.9	6.65E+00	
0	289.46	40	173	2.74	578.75	574	10	2.81E-03	****	4.90E+00	
0	328.05	57	171	3.69	655.93	650	10	3.99E-03	89.4	4.46E+00	
0	365.58	37	58	1.27	730.97	728	6	2.55E-03	74.5	4.10E+00	
0	413.53	29	164	1.48	826.86	822	13	2.04E-03	****	3.72E+00	
0	547.63	23	59	1.44	1095.05	1087	10	1.59E-03	****	2.95E+00	
0	570.00	82	158	1.93	1139.80	1129	21	5.68E-03	83.7	2.85E+00	
0	734.76	32	48	0.91	1469.34	1461	13	2.20E-03	97.4	2.28E+00	
0	772.67	14	49	0.48	1545.17	1541	8	1.01E-03	****	2.18E+00	
0	797.03	49	76	5.36	1593.91	1585	20	3.42E-03	90.9	2.12E+00	
0	847.30	50	134	11.42	1694.47	1673	30	3.46E-03	****	2.00E+00	
1	1014.01	22	4	1.94	2028.00	2025	17	1.50E-03	51.7	1.69E+00	
1	1016.51	20	12	1.94	2033.00	2025	17	1.38E-03	91.7	1.69E+00	
0	1030.94	34	20	5.30	2061.86	2055	14	2.33E-03	67.2	1.67E+00	
0	1105.10	15	40	6.77	2210.25	2198	17	1.04E-03	****	1.56E+00	
0	1170.30	15	11	1.34	2340.71	2337	7	1.07E-03	86.6	1.48E+00	
0	1178.92	9	22	0.99	2357.97	2352	8	6.40E-04	****	1.47E+00	
0	1202.04	9	36	0.86	2404.22	2396	13	6.30E-04	****	1.45E+00	
0	1228.21	22	49	7.91	2456.58	2442	20	1.55E-03	****	1.42E+00	
1	1245.61	19	20	2.22	2491.40	2473	25	1.33E-03	****	1.40E+00	
0	1266.78	36	55	10.78	2533.78	2515	28	2.51E-03	****	1.38E+00	
0	1419.82	10	19	0.59	2840.05	2834	12	7.26E-04	****	1.26E+00	
0	1443.81	11	23	3.91	2888.07	2880	13	7.48E-04	****	1.24E+00	
0	1454.63	10	11	0.62	2909.72	2901	12	6.98E-04	****	1.23E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701048            *
* Acquisition date : 17-DEC-2007 12:04:40 Detector SN#    :                 *
* Detector ID      : GAM14                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.55     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701048           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0292E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-MAR-2007 18:40:51 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.449E+00	6.094E-01	1.502E-01	6.094E-01
CS-137	8.796E-02	3.134E-02	1.740E-02	3.134E-02
TL-208	2.139E-01	4.581E-02	1.610E-02	4.581E-02
BI-212	5.081E-01	2.266E-01	1.376E-01	2.266E-01
PB-212	7.803E-01	8.307E-02	2.711E-02	8.307E-02
BI-214	5.009E-01	1.057E-01	3.307E-02	1.057E-01
PB-214	5.478E-01	8.637E-02	3.398E-02	8.637E-02
RA-223	1.295E-01	1.361E-01	8.670E-02	1.361E-01
AC-228	7.255E-01	1.733E-01	6.428E-02	1.733E-01
TH-234	3.123E-01	3.879E-01	2.200E-01	3.879E-01
NP-237	3.827E-01	1.450E-01	1.067E-01	1.450E-01
AM-243	1.670E-01	4.870E-02	2.079E-02	4.870E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-1.168E-02	4.752E-02	1.955E-02	4.752E-02	NOT IDENT.
RH-101	-2.032E-02	2.201E-02	1.586E-02	2.201E-02	NOT IDENT.
SB-125	-2.355E-02	5.586E-02	4.547E-02	5.586E-02	NOT IDENT.
EU-155	1.156E-02	5.626E-02	4.693E-02	5.626E-02	NOT IDENT.
PO-209	1.860E-01	4.126E+00	3.506E+00	4.126E+00	NOT IDENT.
BI-211	2.258E-01	6.534E-01	5.322E-01	6.534E-01	NOT IDENT.
PA-233	-1.986E-02	3.635E-02	2.987E-02	3.635E-02	NOT IDENT.
PA-234M	-4.342E-01	2.698E+00	2.189E+00	2.698E+00	NOT IDENT.
U-235	4.774E-02	1.227E-01	9.676E-02	1.227E-01	NOT IDENT.
NP-236	-1.227E-02	3.634E-02	2.567E-02	3.634E-02	NOT IDENT.
NP-239	-2.769E-02	1.267E-01	1.074E-01	1.267E-01	NOT IDENT.
AM-241	9.316E-03	7.240E-02	5.352E-02	7.240E-02	NOT IDENT.
CM-243	-5.865E-02	5.121E-02	4.023E-02	5.121E-02	NOT IDENT.
AM-246	6.896E-02	7.246E-02	6.647E-02	7.246E-02	NOT IDENT.
CF-249	1.947E-02	2.180E-02	1.926E-02	2.180E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	358.6960
63.29	418.3602
74.66	451.3770
74.81	451.4432
74.81	451.4432
77.11	452.4564
77.11	452.4564
86.48	521.6435
87.30	560.7607
87.30	560.7607
92.58	456.8000
98.44	325.8988
103.76	352.2401
105.31	314.2087
129.07	331.8974
143.76	314.4054
198.00	298.1288
209.25	277.4008
228.18	261.3708
238.63	244.1739
242.00	210.7900
269.46	210.0915
270.25	232.4725
277.36	226.9189
295.22	171.5361
300.09	206.9098
312.17	178.5346
338.32	181.4142
351.93	162.5529
387.59	110.7066
409.46	134.4875
427.87	133.3426
463.00	113.6092
510.77	83.4057
583.19	80.9760
609.31	94.2692
661.66	76.2470
727.33	78.2279
763.13	78.8946
768.36	67.7049
785.37	42.4156
794.95	49.1089
806.17	72.2617
831.80	63.3571
860.56	59.0663
896.60	53.8492
911.20	54.0127
934.06	53.3135
964.77	65.6850
968.97	95.3242
1001.03	41.4839
1078.86	32.3058
1120.29	44.3866
1155.19	49.6236
1173.23	53.7605
1238.11	41.4141
1280.96	30.4114
1332.51	25.5534
1377.67	22.6463
1401.50	24.7959
1407.98	35.4576
1460.80	21.8904
1509.23	23.0957
1588.20	27.6028
1620.50	21.3281
1729.60	21.6431
1764.49	18.6356

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701048

Total Uranium Activity	2.2088E-02	ug/g
Total Uranium Counting Unc.	5.6758E-02	ug/g
Total Uranium Tpu	5.6758E-08	ug/g
Total Uranium Mda	4.4772E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:07:04.14

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701049.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:05:31
Sample ID        : G198701049           Sample quantity  : 1.44270E+02 GRAM
Detector name    : GAM16                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.58  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.25	49	270	1.51	106.71	104	6	3.42E-03	54.9	
2	0	63.46*	54	506	0.89	127.13	123	8	3.72E-03	80.1	
3	3	74.75*	423	785	1.68	149.72	143	16	2.94E-02	14.5	7.88E+00
4	3	77.12*	590	471	1.06	154.45	143	16	4.10E-02	7.6	
5	2	84.16*	108	606	1.44	168.54	164	28	7.53E-03	42.3	1.34E+00
6	2	87.23	292	497	1.30	174.66	164	28	2.02E-02	14.4	
7	2	89.99	170	348	1.04	180.18	164	28	1.18E-02	19.1	
8	2	92.82*	294	422	1.29	185.84	164	28	2.04E-02	15.8	
9	0	98.45	69	433	2.42	197.10	194	9	4.78E-03	55.7	
10	0	115.30	65	384	0.72	230.81	228	9	4.49E-03	56.0	
11	0	129.04	93	548	1.13	258.30	254	11	6.47E-03	49.7	
12	0	145.55*	70	652	2.54	291.31	282	13	4.87E-03	78.3	
13	0	185.77*	230	449	1.24	371.75	367	11	1.60E-02	20.5	
14	2	209.10*	163	285	1.73	418.42	414	15	1.13E-02	20.1	2.61E+00
15	2	212.64	60	177	1.30	425.50	414	15	4.17E-03	38.1	
16	1	215.54	60	113	1.30	431.29	429	13	4.16E-03	27.1	1.61E+00
17	1	218.54	55	230	1.59	437.29	429	13	3.82E-03	49.1	
18	4	238.67*	1345	200	1.04	477.56	470	19	9.34E-02	3.4	3.01E+00
19	4	241.70	308	346	1.73	483.62	470	19	2.14E-02	15.4	
20	0	270.44	99	345	1.19	541.10	534	13	6.86E-03	40.2	
21	0	278.12*	75	236	0.98	556.45	551	10	5.22E-03	42.5	
22	0	295.32	455	223	1.19	590.86	586	10	3.16E-02	7.7	
23	0	299.66	104	160	1.05	599.55	596	8	7.19E-03	23.3	
24	0	328.22	67	203	1.22	656.67	653	9	4.65E-03	40.2	
25	0	338.30	299	259	1.21	676.83	670	14	2.08E-02	12.8	
26	0	351.80*	803	178	1.15	703.83	697	12	5.57E-02	5.1	
27	0	409.76	71	113	1.70	819.76	816	9	4.90E-03	29.6	
28	0	464.09	107	162	1.58	928.45	921	16	7.45E-03	28.3	
29	0	481.18	28	131	1.76	962.63	954	11	1.93E-03	82.4	
30	0	510.72*	60	245	1.98	1021.73	1014	18	4.13E-03	75.7	
31	0	567.90	13	77	0.92	1136.11	1131	8	9.21E-04	116.4	
32	0	569.71*	4	79	0.81	1139.74	1138	8	3.08E-04	402.3	
33	0	583.30*	432	121	1.35	1166.92	1160	13	3.00E-02	7.6	
34	0	609.34*	527	160	1.39	1219.01	1213	14	3.66E-02	7.0	
35	0	614.14	28	37	0.73	1228.62	1226	6	1.92E-03	40.5	
36	0	661.68	85	73	1.20	1323.72	1319	10	5.91E-03	21.6	
37	0	665.78	36	48	2.91	1331.92	1329	7	2.48E-03	36.4	
38	0	727.84*	82	81	1.43	1456.09	1450	11	5.68E-03	26.5	

Sample ID : G198701049 Acquisition date : 17-DEC-2007 12:05:31

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	768.48	70	71	2.35	1537.40	1531	12	4.83E-03	27.5	
40	0	773.59	67	67	5.72	1547.60	1542	15	4.68E-03	28.6	
41	1	782.32	26	52	2.02	1565.09	1561	18	1.77E-03	51.0	1.74E+00
42	1	785.96	40	68	2.03	1572.37	1561	18	2.81E-03	44.1	
43	0	795.34	56	78	1.52	1591.13	1582	13	3.88E-03	35.2	
44	0	860.64	70	68	1.62	1721.78	1715	13	4.86E-03	27.1	
45	0	892.64	26	66	3.83	1785.80	1777	12	1.81E-03	65.2	
46	0	911.39*	299	59	1.44	1823.33	1816	15	2.07E-02	8.3	
47	5	964.77	41	41	2.08	1930.12	1926	22	2.86E-03	30.1	1.85E+00
48	5	969.12*	166	47	1.97	1938.83	1926	22	1.15E-02	12.2	
49	0	1001.93	31	26	2.06	2004.48	2000	9	2.17E-03	34.7	
50	0	1094.49	15	30	0.56	2189.70	2181	10	1.04E-03	73.0	
51	0	1120.58	111	85	1.80	2241.92	2236	16	7.72E-03	20.7	
52	0	1140.24	25	35	2.08	2281.24	2275	10	1.75E-03	48.3	
53	0	1173.30	28	23	1.86	2347.40	2343	9	1.95E-03	36.8	
54	0	1200.31	30	56	1.98	2401.46	2393	14	2.11E-03	55.2	
55	0	1238.24*	70	26	1.96	2477.37	2470	17	4.89E-03	22.5	
56	0	1349.23	21	18	2.74	2699.49	2692	12	1.47E-03	45.5	
57	0	1359.19	20	16	0.51	2719.42	2711	14	1.39E-03	49.4	
58	0	1379.10	47	26	5.04	2759.28	2752	16	3.25E-03	29.1	
59	0	1401.78	33	12	2.49	2804.67	2796	16	2.30E-03	29.2	
60	0	1460.71*	576	23	1.90	2922.61	2914	20	4.00E-02	4.8	
61	0	1496.52	13	11	1.00	2994.28	2985	15	8.91E-04	63.4	
62	0	1510.24	29	40	1.16	3021.75	3012	22	2.04E-03	57.0	
63	0	1527.48	16	12	2.83	3056.25	3050	12	1.11E-03	50.0	
64	0	1616.42	7	5	1.38	3234.27	3230	9	4.69E-04	69.7	
65	0	1620.57	21	9	2.28	3242.60	3238	9	1.44E-03	34.1	
66	0	1630.94	21	15	2.26	3263.34	3258	12	1.44E-03	43.5	
67	0	1679.86	8	6	0.59	3361.27	3354	11	5.21E-04	70.7	
68	0	1730.81	26	15	1.63	3463.25	3458	13	1.80E-03	41.3	
69	0	1764.50*	75	22	2.57	3530.70	3523	13	5.24E-03	18.7	
70	0	2035.38	10	13	1.32	4073.01	4066	16	7.19E-04	81.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701049       *
* Acquisition date : 17-DEC-2007 12:05:31 Detector SN#    :                 *
* Detector ID      : GAM16                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.58     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701049           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4427E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  1-OCT-2007 14:23:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	5.370E+00	6.020E-01	2.345E-01	0.000E+00
CS-137	5.001E-02	2.160E-02	2.733E-02	0.000E+00
TL-208	2.285E-01	3.774E-02	2.822E-02	0.000E+00
BI-212	3.740E-01	1.970E-01	1.960E-01	0.000E+00
PB-212	6.996E-01	6.081E-02	4.561E-02	0.000E+00
BI-214	5.297E-01	8.258E-02	5.512E-02	0.000E+00
PB-214	6.368E-01	7.134E-02	5.438E-02	0.000E+00
RA-223	1.770E-01	1.398E-01	1.399E-01	0.000E+00
AC-228	7.637E-01	1.388E-01	9.430E-02	0.000E+00
PA-234M	2.678E+00	1.829E+00	3.156E+00	0.000E+00
TH-234	9.495E-01	3.021E-01	3.608E-01	0.000E+00
U-235	1.099E-01	1.689E-01	1.566E-01	0.000E+00
NP-236	3.073E-02	3.363E-02	4.478E-02	0.000E+00
NP-237	4.269E-01	1.241E-01	1.643E-01	0.000E+00
AM-243	1.320E-01	3.843E-02	3.661E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	2.391E-02	1.728E-02	3.179E-02	0.000E+00	FAIL ABUN
RH-101	-5.744E-04	1.639E-02	2.717E-02	0.000E+00	NOT IDENT.
SB-125	-2.165E-02	4.094E-02	6.929E-02	0.000E+00	NOT IDENT.
EU-155	1.335E-02	4.595E-02	8.324E-02	0.000E+00	NOT IDENT.
PO-209	-2.165E+00	3.783E+00	5.240E+00	0.000E+00	NOT IDENT.
BI-211	-1.927E-01	4.396E-01	7.377E-01	0.000E+00	NOT IDENT.
PA-233	-8.310E-03	2.690E-02	4.725E-02	0.000E+00	NOT IDENT.
NP-239	-7.328E-02	1.045E-01	1.743E-01	0.000E+00	NOT IDENT.
AM-241	1.650E-02	5.797E-02	9.530E-02	0.000E+00	NOT IDENT.
CM-243	1.658E-03	4.719E-02	7.455E-02	0.000E+00	NOT IDENT.
AM-246	2.284E-02	5.906E-02	1.038E-01	0.000E+00	NOT IDENT.
CF-249	1.143E-02	1.714E-02	3.113E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:07:05.12

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701049.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:05:31
Sample ID        : G198701049           Sample quantity  : 1.44270E+02 GRAM
Detector name    : GAM16                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.58  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	576	10.66*	1.310E+00	5.370E+00	5.370E+00	11.44
CS-137	661.66	85	85.10*	2.617E+00	4.975E-02	5.001E-02	44.07
TL-208	277.36	75	6.31	5.191E+00	2.987E-01	2.987E-01	85.20
	510.77	60	22.60	3.251E+00	1.054E-01	1.054E-01	151.52
	583.19	432	84.50*	2.913E+00	2.285E-01	2.285E-01	16.85
	763.13	------	1.81	2.311E+00	------	Line Not Found	------
	860.56	70	12.42	2.077E+00	3.529E-01	3.529E-01	54.89
BI-212	727.33	82	11.80*	2.409E+00	3.740E-01	3.740E-01	53.75
	785.37	40	1.10	2.251E+00	2.125E+00	2.125E+00	88.58
	1620.50	21	1.49	1.212E+00	1.498E+00	1.498E+00	68.42
PB-212	74.81	423	10.40	6.117E+00	8.655E-01	8.655E-01	29.71
	77.11	590	17.50	6.363E+00	6.897E-01	6.897E-01	16.72
	87.30	292	7.81	7.165E+00	6.778E-01	6.778E-01	29.65
	238.63	1345	43.30*	5.778E+00	6.996E-01	6.996E-01	8.87
	300.09	104	3.28	4.917E+00	8.352E-01	8.352E-01	47.00
BI-214	609.31	527	46.10*	2.808E+00	5.296E-01	5.297E-01	15.91
	768.36	70	4.94	2.297E+00	7.980E-01	7.981E-01	55.64
	806.17	------	1.22	2.201E+00	------	Line Not Found	------
	934.06	------	3.03	1.929E+00	------	Line Not Found	------
	1120.29	111	15.10	1.639E+00	5.845E-01	5.846E-01	41.94
	1155.19	------	1.63	1.595E+00	------	Line Not Found	------
	1238.11	70	5.79	1.501E+00	1.053E+00	1.053E+00	45.41
	1280.96	------	1.43	1.458E+00	------	Line Not Found	------
	1377.67	47	4.00	1.371E+00	1.109E+00	1.109E+00	58.51
	1401.50	33	1.27	1.353E+00	2.502E+00	2.503E+00	58.66
	1407.98	------	2.15	1.348E+00	------	Line Not Found	------
	1509.23	29	2.11	1.276E+00	1.419E+00	1.419E+00	114.23
	1729.60	26	2.92	1.160E+00	9.976E-01	9.976E-01	82.75
	1764.49	75	15.40	1.146E+00	5.557E-01	5.558E-01	37.88
PB-214	74.81	423	6.44	6.117E+00	1.398E+00	1.398E+00	29.71
	77.11	590	10.80	6.363E+00	1.117E+00	1.118E+00	16.72
	87.30	292	4.84	7.165E+00	1.094E+00	1.094E+00	29.65

Sample ID : G198701049 Acquisition date : 17-DEC-2007 12:05:31

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	308	7.43	5.728E+00	9.405E-01	9.406E-01	31.30
	295.22	455	19.30	4.970E+00	6.173E-01	6.173E-01	16.42
	351.93	803	37.60*	4.361E+00	6.368E-01	6.368E-01	11.43
RA-223	269.46	99	13.70*	5.296E+00	1.770E-01	1.770E-01	80.57
AC-228	129.07	93	2.42	7.821E+00	6.400E-01	6.400E-01	99.55
	209.25	163	3.89	6.301E+00	8.644E-01	8.644E-01	40.60
	270.25	99	3.46	5.296E+00	7.008E-01	7.008E-01	80.57
	338.32	299	11.27	4.492E+00	7.692E-01	7.692E-01	26.11
	409.46	71	1.92	3.877E+00	1.232E+00	1.232E+00	59.46
	463.00	107	4.40	3.513E+00	9.029E-01	9.029E-01	56.99
	794.95	56	4.25	2.228E+00	7.682E-01	7.682E-01	70.94
	911.20	299	25.80*	1.972E+00	7.637E-01	7.637E-01	18.55
	964.77	41	4.99	1.874E+00	5.734E-01	5.734E-01	60.73
	968.97	166	15.80	1.866E+00	7.331E-01	7.331E-01	25.66
	1588.20	------	3.22	1.230E+00	------ Line Not Found		------
PA-234M	1001.03	31	0.84*	1.811E+00	2.678E+00	2.678E+00	69.71
TH-234	63.29	54	4.80	4.620E+00	3.139E-01	3.139E-01	160.24
	92.58	294	5.41*	7.457E+00	9.495E-01	9.495E-01	32.47
U-235	143.76	70	10.96*	7.574E+00	1.099E-01	1.099E-01	156.78
NP-236	98.44	69	38.00*	7.663E+00	3.073E-02	3.073E-02	111.65
NP-237	86.48	292	12.40*	7.165E+00	4.269E-01	4.269E-01	29.65
AM-243	74.66	423	68.20*	6.117E+00	1.320E-01	1.320E-01	29.71

Flag: "*" = Keyline

Sample ID : G198701049 Acquisition date : 17-DEC-2007 12:05:31

Total number of lines in spectrum 70
Number of unidentified lines 28
Number of lines tentatively identified by NID 42 60.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	5.370E+00	5.370E+00	0.614E+00	11.44	
CS-137	9.47E+08S	1.01	4.975E-02	5.001E-02	2.204E-02	44.07	
TL-208	4.43E+17S	1.00	2.285E-01	2.285E-01	0.385E-01	16.85	
BI-212	4.43E+17S	1.00	3.740E-01	3.740E-01	2.010E-01	53.75	
PB-212	4.43E+17S	1.00	6.996E-01	6.996E-01	0.620E-01	8.87	
BI-214	5.05E+10S	1.00	5.296E-01	5.297E-01	0.843E-01	15.91	
PB-214	5.05E+10S	1.00	6.368E-01	6.368E-01	0.728E-01	11.43	
RA-223	1.04E+12S	1.00	1.770E-01	1.770E-01	1.426E-01	80.57	
AC-228	4.43E+17S	1.00	7.637E-01	7.637E-01	1.416E-01	18.55	
PA-234M	1.41E+17S	1.00	2.678E+00	2.678E+00	1.867E+00	69.71	
TH-234	1.41E+17S	1.00	9.495E-01	9.495E-01	3.083E-01	32.47	
U-235	2.22E+16S	1.00	1.099E-01	1.099E-01	1.723E-01	156.78	
NP-236	4.89E+12S	1.00	3.073E-02	3.073E-02	3.431E-02	111.65	
NP-237	6.75E+13S	1.00	4.269E-01	4.269E-01	1.266E-01	29.65	
AM-243	2.33E+11S	1.00	1.320E-01	1.320E-01	0.392E-01	29.71	
			---	---			
		Total Activity :	1.316E+01	1.316E+01			

Grand Total Activity : 1.316E+01 1.316E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701049 Acquisition date : 17-DEC-2007 12:05:31

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.25	49	270	1.51	106.71	104	6	3.42E-03	****	2.90E+00	
2	84.16	108	606	1.44	168.54	164	28	7.53E-03	84.5	6.96E+00	
2	89.99	170	348	1.04	180.18	164	28	1.18E-02	38.3	7.32E+00	
0	115.30	65	384	0.72	230.81	228	9	4.49E-03	****	7.90E+00	
0	185.77	230	449	1.24	371.75	367	11	1.60E-02	41.0	6.76E+00	
2	212.64	60	177	1.30	425.50	414	15	4.17E-03	76.2	6.23E+00	
1	215.54	60	113	1.30	431.29	429	13	4.16E-03	54.3	6.18E+00	
1	218.54	55	230	1.59	437.29	429	13	3.82E-03	98.1	6.13E+00	
0	328.22	67	203	1.22	656.67	653	9	4.65E-03	80.5	4.60E+00	
0	481.18	28	131	1.76	962.63	954	11	1.93E-03	****	3.41E+00	
0	567.90	13	77	0.92	1136.11	1131	8	9.21E-04	****	2.98E+00	
0	569.71	4	79	0.81	1139.74	1138	8	3.08E-04	****	2.97E+00	
0	614.14	28	37	0.73	1228.62	1226	6	1.92E-03	81.0	2.79E+00	
0	665.78	36	48	2.91	1331.92	1329	7	2.48E-03	72.9	2.60E+00	
0	773.59	67	67	5.72	1547.60	1542	15	4.68E-03	57.3	2.28E+00	
1	782.32	26	52	2.02	1565.09	1561	18	1.77E-03	****	2.26E+00	
0	892.64	26	66	3.83	1785.80	1777	12	1.81E-03	****	2.01E+00	
0	1094.49	15	30	0.56	2189.70	2181	10	1.04E-03	****	1.67E+00	
0	1140.24	25	35	2.08	2281.24	2275	10	1.75E-03	96.6	1.61E+00	
0	1173.30	28	23	1.86	2347.40	2343	9	1.95E-03	73.5	1.57E+00	T
0	1200.31	30	56	1.98	2401.46	2393	14	2.11E-03	****	1.54E+00	
0	1349.23	21	18	2.74	2699.49	2692	12	1.47E-03	91.0	1.40E+00	
0	1359.19	20	16	0.51	2719.42	2711	14	1.39E-03	98.8	1.39E+00	
0	1496.52	13	11	1.00	2994.28	2985	15	8.91E-04	****	1.29E+00	
0	1527.48	16	12	2.83	3056.25	3050	12	1.11E-03	****	1.27E+00	
0	1616.42	7	5	1.38	3234.27	3230	9	4.69E-04	****	1.21E+00	
0	1630.94	21	15	2.26	3263.34	3258	12	1.44E-03	87.0	1.21E+00	
0	1679.86	8	6	0.59	3361.27	3354	11	5.21E-04	****	1.18E+00	
0	2035.38	10	13	1.32	4073.01	4066	16	7.19E-04	****	1.07E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701049            *
* Acquisition date : 17-DEC-2007 12:05:31 Detector SN#    :                 *
* Detector ID      : GAM16                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.58     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701049           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4427E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  1-OCT-2007 14:23:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	5.370E+00	6.020E-01	1.173E-01	6.020E-01
CS-137	5.001E-02	2.160E-02	1.367E-02	2.160E-02
TL-208	2.285E-01	3.774E-02	1.412E-02	3.774E-02
BI-212	3.740E-01	1.970E-01	9.804E-02	1.970E-01
PB-212	6.996E-01	6.081E-02	2.282E-02	6.081E-02
BI-214	5.297E-01	8.258E-02	2.758E-02	8.258E-02
PB-214	6.368E-01	7.134E-02	2.721E-02	7.134E-02
RA-223	1.770E-01	1.398E-01	6.998E-02	1.398E-01
AC-228	7.637E-01	1.388E-01	4.718E-02	1.388E-01
PA-234M	2.678E+00	1.829E+00	1.579E+00	1.829E+00
TH-234	9.495E-01	3.021E-01	1.805E-01	3.021E-01
U-235	1.099E-01	1.689E-01	7.835E-02	1.689E-01
NP-236	3.073E-02	3.363E-02	2.240E-02	3.363E-02
NP-237	4.269E-01	1.241E-01	8.219E-02	1.241E-01
AM-243	1.320E-01	3.843E-02	1.831E-02	3.843E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.391E-02	1.728E-02	1.590E-02	1.728E-02	FAIL ABUN
RH-101	-5.744E-04	1.639E-02	1.360E-02	1.639E-02	NOT IDENT.
SB-125	-2.165E-02	4.094E-02	3.467E-02	4.094E-02	NOT IDENT.
EU-155	1.335E-02	4.595E-02	4.165E-02	4.595E-02	NOT IDENT.
PO-209	-2.165E+00	3.783E+00	2.622E+00	3.783E+00	NOT IDENT.
BI-211	-1.927E-01	4.396E-01	3.691E-01	4.396E-01	NOT IDENT.
PA-233	-8.310E-03	2.690E-02	2.364E-02	2.690E-02	NOT IDENT.
NP-239	-7.328E-02	1.045E-01	8.719E-02	1.045E-01	NOT IDENT.
AM-241	1.650E-02	5.797E-02	4.768E-02	5.797E-02	NOT IDENT.
CM-243	1.658E-03	4.719E-02	3.730E-02	4.719E-02	NOT IDENT.
AM-246	2.284E-02	5.906E-02	5.195E-02	5.906E-02	NOT IDENT.
CF-249	1.143E-02	1.714E-02	1.557E-02	1.714E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	419.6558
63.29	478.3952
74.66	552.4365
74.81	552.5504
74.81	552.5504
77.11	554.2865
77.11	554.2865
86.48	502.5998
87.30	503.1175
87.30	503.1175
92.58	506.3997
98.44	408.7255
103.76	422.9758
105.31	414.8851
129.07	400.2045
143.76	416.0341
198.00	355.1489
209.25	344.1235
228.18	346.5533
238.63	324.8543
242.00	272.7826
269.46	259.6654
270.25	259.7928
277.36	267.6592
295.22	254.5771
300.09	214.2596
312.17	202.8684
338.32	180.6151
351.93	201.5835
387.59	152.6875
409.46	159.0844
427.87	154.5883
463.00	123.4039
510.77	142.9542
583.19	125.1860
609.31	132.2702
661.66	95.6624
727.33	81.4014
763.13	91.4307
768.36	153.8394
785.37	72.5713
794.95	85.4297
806.17	80.5465
831.80	82.0632
860.56	73.3170
896.60	79.7224
911.20	60.9740
934.06	68.0431
964.77	71.1963
968.97	56.0766
1001.03	61.3940
1078.86	55.5853
1120.29	68.7082
1155.19	51.4960
1173.23	69.9462
1238.11	54.4686
1280.96	36.2874
1332.51	38.7570
1377.67	36.2291
1401.50	30.7818
1407.98	20.0403
1460.80	28.9764
1509.23	34.6445
1588.20	45.1624
1620.50	24.8346
1729.60	18.5417
1764.49	18.6451

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701049

Total Uranium Activity	5.0864E-02	ug/g
Total Uranium Counting Unc.	7.8150E-02	ug/g
Total Uranium Tpu	7.8150E-08	ug/g
Total Uranium Mda	3.6250E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:07:42.84

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701050.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:06:49
Sample ID        : G198701050           Sample quantity  : 1.17200E+02 GRAM
Detector name    : GAM19                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.83  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.85*	14	264	1.11	93.34	90	7	9.93E-04	212.8	
2	0	63.38*	44	334	1.11	126.36	123	8	3.07E-03	83.1	
3	0	66.96	69	303	2.31	133.51	131	7	4.81E-03	43.2	
4	2	74.97	318	516	1.52	149.53	145	16	2.21E-02	14.3	2.33E+00
5	2	77.31	563	467	1.53	154.20	145	16	3.91E-02	8.4	
6	2	87.39	211	428	1.54	174.35	163	29	1.47E-02	18.8	2.63E+00
7	2	89.95	136	400	1.55	179.46	163	29	9.42E-03	29.2	
8	2	92.80*	179	325	1.34	185.16	163	29	1.24E-02	23.6	
9	0	105.48	72	193	0.82	210.49	208	7	4.99E-03	34.3	
10	0	108.80	17	215	1.17	217.14	214	6	1.17E-03	138.6	
11	0	129.25	52	252	1.08	258.00	255	7	3.62E-03	52.4	
12	0	143.98*	28	233	1.84	287.42	284	7	1.95E-03	101.3	
13	0	155.14	67	305	1.69	309.73	305	9	4.67E-03	48.3	
14	0	185.73*	152	341	1.39	370.86	366	11	1.06E-02	26.9	
15	0	198.27*	15	250	1.02	395.92	392	9	1.05E-03	207.3	
16	0	209.45	82	309	1.17	418.27	414	10	5.66E-03	41.9	
17	2	238.65*	1042	202	1.31	476.63	470	19	7.24E-02	4.1	1.02E+00
18	2	241.61	253	233	1.70	482.53	470	19	1.76E-02	16.3	
19	0	269.87	80	230	1.67	539.02	533	11	5.56E-03	38.4	
20	0	277.59	80	185	1.22	554.45	550	11	5.59E-03	34.5	
21	0	295.19*	314	149	1.33	589.61	585	9	2.18E-02	9.6	
22	0	300.20	43	203	0.97	599.62	595	9	3.00E-03	61.4	
23	0	309.09	29	203	2.97	617.39	612	12	2.03E-03	99.4	
24	0	327.84	78	161	1.55	654.88	650	9	5.39E-03	31.7	
25	0	338.31	247	238	1.50	675.79	668	14	1.71E-02	14.7	
26	0	351.97*	532	155	1.61	703.10	698	12	3.69E-02	6.7	
27	0	388.06	51	158	5.15	775.22	769	14	3.56E-03	53.8	
28	0	410.01	58	144	1.79	819.11	813	13	4.05E-03	44.2	
29	0	429.35	44	141	4.56	857.76	851	13	3.03E-03	58.4	
30	0	463.22	56	115	2.00	925.45	919	11	3.89E-03	39.5	
31	0	511.05*	60	132	2.34	1021.05	1014	15	4.18E-03	59.1	
32	0	546.99*	20	45	0.94	1092.89	1088	8	1.37E-03	71.0	
33	0	552.96	33	38	1.86	1104.83	1101	8	2.31E-03	36.5	
34	0	568.56*	115	119	2.31	1136.02	1129	13	8.01E-03	23.2	
35	0	583.58*	328	123	1.49	1166.04	1159	15	2.28E-02	9.7	
36	0	609.59*	296	176	1.46	1218.03	1212	14	2.06E-02	11.5	
37	0	622.60	28	109	3.25	1244.04	1233	17	1.93E-03	88.6	
38	0	728.52	140	96	2.54	1455.79	1444	24	9.72E-03	20.4	

Sample ID : G198701050 Acquisition date : 17-DEC-2007 12:06:49

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	769.14*	17	80	1.58	1536.99	1529	11	1.16E-03	121.0	
40	0	795.27	52	29	1.18	1589.23	1585	9	3.58E-03	23.5	
41	0	806.39	24	35	0.56	1611.46	1608	8	1.64E-03	48.5	
42	0	862.28	41	65	1.00	1723.20	1715	13	2.83E-03	44.5	
43	0	904.58	18	35	2.27	1807.79	1803	9	1.23E-03	65.6	
44	0	911.74	251	63	1.67	1822.09	1814	17	1.74E-02	9.7	
45	0	950.90	11	42	1.32	1900.41	1892	10	7.78E-04	112.6	
46	1	965.13	26	65	2.00	1928.84	1921	27	1.78E-03	62.9	1.71E+00
47	1	969.86	138	50	2.01	1938.31	1921	27	9.62E-03	13.8	
48	0	991.37	24	51	4.86	1981.32	1968	19	1.68E-03	74.3	
49	0	1002.49*	8	44	3.50	2003.56	1995	18	5.51E-04	217.9	
50	0	1012.62	12	31	0.52	2023.82	2016	12	8.35E-04	95.9	
51	0	1047.66	27	38	3.60	2093.87	2084	15	1.84E-03	54.0	
52	0	1080.08	47	56	7.07	2158.70	2142	25	3.23E-03	45.8	
53	0	1120.99	79	24	1.69	2240.51	2236	9	5.46E-03	16.0	
54	0	1137.29	25	12	0.79	2273.10	2268	10	1.71E-03	35.0	
55	0	1195.27	17	11	1.50	2389.07	2385	8	1.16E-03	43.3	
56	0	1239.85	26	39	1.72	2478.21	2473	11	1.77E-03	53.4	
57	0	1313.94	21	26	3.60	2626.40	2616	15	1.44E-03	58.3	
58	0	1379.47	20	16	1.54	2757.47	2753	8	1.42E-03	40.3	
59	0	1408.90	22	20	2.29	2816.32	2810	13	1.55E-03	46.1	
60	0	1435.36	15	14	0.64	2869.25	2864	11	1.03E-03	55.1	
61	0	1461.72*	244	19	2.02	2921.97	2914	19	1.70E-02	8.1	
62	0	1500.05	51	30	7.98	2998.64	2982	30	3.57E-03	34.0	
63	0	1514.11	7	14	3.46	3026.76	3019	11	4.76E-04	111.8	
64	1	1589.33	39	26	2.25	3177.23	3170	23	2.72E-03	29.3	2.51E+00
65	1	1592.71	29	17	2.04	3184.00	3170	23	2.00E-03	36.3	
66	0	1614.52*	6	4	1.02	3227.63	3223	8	4.13E-04	82.7	
67	0	1640.39	11	17	2.59	3279.38	3273	11	7.29E-04	81.0	
68	0	1643.61*	4	4	1.36	3285.81	3283	7	2.94E-04	139.5	
69	0	1730.57	31	8	3.42	3459.79	3452	15	2.12E-03	26.7	
70	0	1755.75	6	9	1.37	3510.15	3502	10	3.98E-04	110.3	
71	0	1765.56	73	22	1.93	3529.79	3522	17	5.09E-03	18.6	
72	0	1814.83	21	8	5.23	3628.36	3620	16	1.46E-03	37.2	
73	0	1827.10	9	16	0.91	3652.91	3644	13	6.19E-04	98.9	
74	0	1848.94	20	5	1.38	3696.60	3691	10	1.39E-03	30.6	
75	0	1909.40	14	0	0.74	3817.57	3812	12	9.72E-04	26.7	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701050       *
* Acquisition date : 17-DEC-2007 12:06:49 Detector SN#    :                 *
* Detector ID      : GAM19                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.83     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701050           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1720E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  6-MAR-2007 21:45:12 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.087E+00	5.223E-01	2.869E-01	0.000E+00
RH-101	5.983E-03	2.432E-02	2.963E-02	0.000E+00
SB-125	7.453E-02	8.542E-02	8.987E-02	0.000E+00
EU-155	8.104E-02	5.476E-02	8.218E-02	0.000E+00
TL-208	2.384E-01	4.872E-02	3.343E-02	0.000E+00
BI-212	8.766E-01	3.577E-01	2.296E-01	0.000E+00
PB-212	7.502E-01	7.560E-02	5.322E-02	0.000E+00
BI-214	4.086E-01	9.735E-02	6.536E-02	0.000E+00
PB-214	5.849E-01	8.449E-02	5.891E-02	0.000E+00
RA-223	1.986E-01	1.500E-01	1.595E-01	0.000E+00
AC-228	8.727E-01	1.876E-01	1.084E-01	0.000E+00
PA-234M	9.239E-01	3.946E+00	3.277E+00	0.000E+00
TH-234	8.181E-01	3.819E-01	3.946E-01	0.000E+00
U-235	6.026E-02	1.197E-01	1.843E-01	0.000E+00
NP-237	4.418E-01	1.654E-01	1.819E-01	0.000E+00
AM-243	1.472E-01	4.226E-02	4.524E-02	0.000E+00
CM-243	7.283E-02	4.921E-02	8.214E-02	0.000E+00
AM-246	1.748E-01	1.576E-01	1.105E-01	0.000E+00
CF-249	3.458E-02	3.652E-02	3.440E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	-4.402E-03	2.092E-02	3.473E-02	0.000E+00	NOT IDENT.
CS-137	3.050E-03	2.202E-02	3.738E-02	0.000E+00	NOT IDENT.
PO-209	-1.377E-01	3.932E+00	6.466E+00	0.000E+00	NOT IDENT.
BI-211	-3.012E-01	6.065E-01	9.615E-01	0.000E+00	NOT IDENT.
PA-233	-2.942E-03	4.037E-02	5.785E-02	0.000E+00	NOT IDENT.
NP-236	5.398E-02	3.318E-02	5.477E-02	0.000E+00	NOT IDENT.
NP-239	-2.466E-02	1.234E-01	2.053E-01	0.000E+00	NOT IDENT.
AM-241	-2.605E-02	8.311E-02	1.269E-01	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:07:43.88

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701050.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:06:49
Sample ID        : G198701050           Sample quantity  : 1.17200E+02 GRAM
Detector name    : GAM19                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.83  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	244	10.66*	1.188E+00	3.087E+00	3.087E+00	17.27
RH-101	198.00	15	73.00*	5.807E+00	5.712E-03	5.983E-03	414.73
SB-125	427.87	44	29.80*	3.328E+00	7.047E-02	7.453E-02	116.96
EU-155	105.31	72	21.20*	6.903E+00	7.859E-02	8.104E-02	68.95
TL-208	277.36	80	6.31	4.617E+00	4.421E-01	4.421E-01	69.37
	510.77	60	22.60	2.904E+00	1.470E-01	1.470E-01	118.39
	583.19	328	84.50*	2.609E+00	2.384E-01	2.384E-01	20.85
	763.13	------	1.81	2.083E+00	------	Line Not Found	------
	860.56	41	12.42	1.872E+00	2.805E-01	2.805E-01	89.51
BI-212	727.33	140	11.80*	2.167E+00	8.766E-01	8.766E-01	41.64
	785.37	------	1.10	2.031E+00	------	Line Not Found	------
	1620.50	------	1.49	1.102E+00	------	Line Not Found	------
PB-212	74.81	318	10.40	5.079E+00	9.652E-01	9.652E-01	29.29
	77.11	563	17.50	5.327E+00	9.668E-01	9.668E-01	18.06
	87.30	211	7.81	6.168E+00	7.014E-01	7.014E-01	38.21
	238.63	1042	43.30*	5.140E+00	7.502E-01	7.502E-01	10.28
	300.09	43	3.28	4.360E+00	4.831E-01	4.831E-01	122.97
BI-214	609.31	296	46.10*	2.518E+00	4.086E-01	4.086E-01	24.31
	768.36	17	4.94	2.069E+00	2.619E-01	2.619E-01	242.17
	806.17	24	1.22	1.985E+00	1.561E+00	1.561E+00	97.43
	934.06	------	3.03	1.744E+00	------	Line Not Found	------
	1120.29	79	15.10	1.484E+00	5.619E-01	5.619E-01	32.85
	1155.19	------	1.63	1.445E+00	------	Line Not Found	------
	1238.11	26	5.79	1.359E+00	5.193E-01	5.193E-01	107.05
	1280.96	------	1.43	1.322E+00	------	Line Not Found	------
	1377.67	20	4.00	1.244E+00	6.590E-01	6.590E-01	80.80
	1401.50	------	1.27	1.228E+00	------	Line Not Found	------
	1407.98	22	2.15	1.223E+00	1.357E+00	1.357E+00	92.33
	1509.23	------	2.11	1.160E+00	------	Line Not Found	------
	1729.60	31	2.92	1.057E+00	1.583E+00	1.583E+00	53.65
	1764.49	73	15.40	1.045E+00	7.300E-01	7.301E-01	37.59
PB-214	74.81	318	6.44	5.079E+00	1.559E+00	1.559E+00	29.29

Sample ID : G198701050 Acquisition date : 17-DEC-2007 12:06:49

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	77.11	563	10.80	5.327E+00	1.567E+00	1.567E+00	18.06
	87.30	211	4.84	6.168E+00	1.132E+00	1.132E+00	38.21
	242.00	253	7.43	5.096E+00	1.070E+00	1.070E+00	33.22
	295.22	314	19.30	4.414E+00	5.902E-01	5.903E-01	20.21
	351.93	532	37.60*	3.873E+00	5.849E-01	5.849E-01	14.74
RA-223	269.46	80	13.70*	4.712E+00	1.986E-01	1.986E-01	77.09
AC-228	129.07	52	2.42	6.983E+00	4.944E-01	4.944E-01	105.03
	209.25	82	3.89	5.609E+00	5.986E-01	5.986E-01	83.95
	270.25	80	3.46	4.712E+00	7.862E-01	7.862E-01	77.09
	338.32	247	11.27	3.990E+00	8.794E-01	8.794E-01	30.04
	409.46	58	1.92	3.449E+00	1.412E+00	1.412E+00	88.67
	463.00	56	4.40	3.138E+00	6.496E-01	6.496E-01	79.20
	794.95	52	4.25	2.009E+00	9.671E-01	9.671E-01	47.93
	911.20	251	25.80*	1.782E+00	8.727E-01	8.727E-01	21.94
	964.77	26	4.99	1.694E+00	4.846E-01	4.846E-01	126.19
	968.97	138	15.80	1.687E+00	8.321E-01	8.321E-01	29.25
	1588.20	39	3.22	1.117E+00	1.744E+00	1.744E+00	58.97
PA-234M	1001.03	8	0.84*	1.638E+00	9.239E-01	9.239E-01	435.81
TH-234	63.29	44	4.80	3.565E+00	4.134E-01	4.134E-01	166.42
	92.58	179	5.41*	6.478E+00	8.181E-01	8.181E-01	47.64
U-235	143.76	28	10.96*	6.801E+00	6.026E-02	6.026E-02	202.65
NP-237	86.48	211	12.40*	6.168E+00	4.418E-01	4.418E-01	38.21
AM-243	74.66	318	68.20*	5.079E+00	1.472E-01	1.472E-01	29.29
CM-243	103.76	72	23.00*	6.903E+00	7.244E-02	7.283E-02	68.95
AM-246	1078.86	47	27.80*	1.533E+00	1.747E-01	1.748E-01	92.03
CF-249	387.59	51	66.00*	3.597E+00	3.456E-02	3.458E-02	107.78

Flag: "*" = Keyline

Sample ID : G198701050 Acquisition date : 17-DEC-2007 12:06:49

Total number of lines in spectrum 75
Number of unidentified lines 32
Number of lines tentatively identified by NID 43 57.33%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.087E+00	3.087E+00	0.533E+00	17.27	
RH-101	1.04E+08S	1.05	5.712E-03	5.983E-03	24.81E-03	414.73	
SB-125	8.62E+07S	1.06	7.047E-02	7.453E-02	8.717E-02	116.96	
EU-155	1.57E+08S	1.03	7.859E-02	8.104E-02	5.588E-02	68.95	
TL-208	4.43E+17S	1.00	2.384E-01	2.384E-01	0.497E-01	20.85	
BI-212	4.43E+17S	1.00	8.766E-01	8.766E-01	3.650E-01	41.64	
PB-212	4.43E+17S	1.00	7.502E-01	7.502E-01	0.771E-01	10.28	
BI-214	5.05E+10S	1.00	4.086E-01	4.086E-01	0.993E-01	24.31	
PB-214	5.05E+10S	1.00	5.849E-01	5.849E-01	0.862E-01	14.74	
RA-223	1.04E+12S	1.00	1.986E-01	1.986E-01	1.531E-01	77.09	
AC-228	4.43E+17S	1.00	8.727E-01	8.727E-01	1.915E-01	21.94	
PA-234M	1.41E+17S	1.00	9.239E-01	9.239E-01	40.26E-01	435.81	
TH-234	1.41E+17S	1.00	8.181E-01	8.181E-01	3.897E-01	47.64	
U-235	2.22E+16S	1.00	6.026E-02	6.026E-02	12.21E-02	202.65	
NP-237	6.75E+13S	1.00	4.418E-01	4.418E-01	1.688E-01	38.21	
AM-243	2.33E+11S	1.00	1.472E-01	1.472E-01	0.431E-01	29.29	
CM-243	8.99E+08S	1.01	7.244E-02	7.283E-02	5.022E-02	68.95	
AM-246	2.18E+11S	1.00	1.747E-01	1.748E-01	1.608E-01	92.03	
CF-249	1.11E+10S	1.00	3.456E-02	3.458E-02	3.727E-02	107.78	
		Total Activity :	9.844E+00	9.852E+00			

Grand Total Activity : 9.844E+00 9.852E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701050 Acquisition date : 17-DEC-2007 12:06:49

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.85	14	264	1.11	93.34	90	7	9.93E-04	****	1.13E+00	
0	66.96	69	303	2.31	133.51	131	7	4.81E-03	86.5	4.08E+00	
2	89.95	136	400	1.55	179.46	163	29	9.42E-03	58.5	6.33E+00	
0	108.80	17	215	1.17	217.14	214	6	1.17E-03	****	6.96E+00	
0	155.14	67	305	1.69	309.73	305	9	4.67E-03	96.7	6.61E+00	
0	185.73	152	341	1.39	370.86	366	11	1.06E-02	53.9	6.04E+00	
0	309.09	29	203	2.97	617.39	612	12	2.03E-03	****	4.27E+00	
0	327.84	78	161	1.55	654.88	650	9	5.39E-03	63.4	4.08E+00	
0	546.99	20	45	0.94	1092.89	1088	8	1.37E-03	****	2.75E+00	
0	552.96	33	38	1.86	1104.83	1101	8	2.31E-03	73.0	2.73E+00	
0	568.56	115	119	2.31	1136.02	1129	13	8.01E-03	46.3	2.67E+00	
0	622.60	28	109	3.25	1244.04	1233	17	1.93E-03	****	2.47E+00	
0	904.58	18	35	2.27	1807.79	1803	9	1.23E-03	****	1.79E+00	
0	950.90	11	42	1.32	1900.41	1892	10	7.78E-04	****	1.72E+00	
0	991.37	24	51	4.86	1981.32	1968	19	1.68E-03	****	1.65E+00	
0	1012.62	12	31	0.52	2023.82	2016	12	8.35E-04	****	1.62E+00	
0	1047.66	27	38	3.60	2093.87	2084	15	1.84E-03	****	1.58E+00	
0	1137.29	25	12	0.79	2273.10	2268	10	1.71E-03	70.0	1.47E+00	
0	1195.27	17	11	1.50	2389.07	2385	8	1.16E-03	86.7	1.40E+00	
0	1313.94	21	26	3.60	2626.40	2616	15	1.44E-03	****	1.29E+00	
0	1435.36	15	14	0.64	2869.25	2864	11	1.03E-03	****	1.21E+00	
0	1500.05	51	30	7.98	2998.64	2982	30	3.57E-03	68.1	1.17E+00	
0	1514.11	7	14	3.46	3026.76	3019	11	4.76E-04	****	1.16E+00	
1	1592.71	29	17	2.04	3184.00	3170	23	2.00E-03	72.7	1.12E+00	
0	1614.52	6	4	1.02	3227.63	3223	8	4.13E-04	****	1.11E+00	
0	1640.39	11	17	2.59	3279.38	3273	11	7.29E-04	****	1.09E+00	
0	1643.61	4	4	1.36	3285.81	3283	7	2.94E-04	****	1.09E+00	
0	1755.75	6	9	1.37	3510.15	3502	10	3.98E-04	****	1.05E+00	
0	1814.83	21	8	5.23	3628.36	3620	16	1.46E-03	74.4	1.03E+00	
0	1827.10	9	16	0.91	3652.91	3644	13	6.19E-04	****	1.02E+00	
0	1848.94	20	5	1.38	3696.60	3691	10	1.39E-03	61.1	1.02E+00	
0	1909.40	14	0	0.74	3817.57	3812	12	9.72E-04	53.5	1.00E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701050            *
* Acquisition date : 17-DEC-2007 12:06:49 Detector SN#    :                 *
* Detector ID      : GAM19                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.83     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701050           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1720E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  6-MAR-2007 21:45:12 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.087E+00	5.223E-01	1.436E-01	5.223E-01
RH-101	5.983E-03	2.432E-02	1.482E-02	2.432E-02
SB-125	7.453E-02	8.542E-02	4.496E-02	8.542E-02
EU-155	8.104E-02	5.476E-02	4.111E-02	5.476E-02
TL-208	2.384E-01	4.872E-02	1.672E-02	4.872E-02
BI-212	8.766E-01	3.577E-01	1.148E-01	3.577E-01
PB-212	7.502E-01	7.560E-02	2.663E-02	7.560E-02
BI-214	4.086E-01	9.735E-02	3.270E-02	9.735E-02
PB-214	5.849E-01	8.449E-02	2.947E-02	8.449E-02
RA-223	1.986E-01	1.500E-01	7.982E-02	1.500E-01
AC-228	8.727E-01	1.876E-01	5.424E-02	1.876E-01
PA-234M	9.239E-01	3.946E+00	1.639E+00	3.946E+00
TH-234	8.181E-01	3.819E-01	1.974E-01	3.819E-01
U-235	6.026E-02	1.197E-01	9.222E-02	1.197E-01
NP-237	4.418E-01	1.654E-01	9.099E-02	1.654E-01
AM-243	1.472E-01	4.226E-02	2.263E-02	4.226E-02
CM-243	7.283E-02	4.921E-02	4.110E-02	4.921E-02
AM-246	1.748E-01	1.576E-01	5.529E-02	1.576E-01
CF-249	3.458E-02	3.652E-02	1.721E-02	3.652E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-4.402E-03	2.092E-02	1.738E-02	2.092E-02	NOT IDENT.
CS-137	3.050E-03	2.202E-02	1.870E-02	2.202E-02	NOT IDENT.
PO-209	-1.377E-01	3.932E+00	3.235E+00	3.932E+00	NOT IDENT.
BI-211	-3.012E-01	6.065E-01	4.810E-01	6.065E-01	NOT IDENT.
PA-233	-2.942E-03	4.037E-02	2.894E-02	4.037E-02	NOT IDENT.
NP-236	5.398E-02	3.318E-02	2.740E-02	3.318E-02	NOT IDENT.
NP-239	-2.466E-02	1.234E-01	1.027E-01	1.234E-01	NOT IDENT.
AM-241	-2.605E-02	8.311E-02	6.350E-02	8.311E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	331.3789
63.29	325.5643
74.66	413.2463
74.81	413.3183
74.81	413.3183
77.11	414.4110
77.11	414.4110
86.48	324.5255
87.30	324.8070
87.30	324.8070
92.58	326.5942
98.44	248.9005
103.76	285.9277
105.31	233.4366
129.07	300.0047
143.76	326.7109
198.00	250.6897
209.25	268.2566
228.18	247.9269
238.63	245.1487
242.00	245.6187
269.46	186.1806
270.25	189.9623
277.36	191.3261
295.22	158.8689
300.09	185.7931
312.17	160.1895
338.32	153.1515
351.93	129.6182
387.59	117.8156
409.46	125.3743
427.87	126.2922
463.00	94.8059
510.77	98.3692
583.19	96.8037
609.31	102.5750
661.66	95.0855
727.33	61.8223
763.13	72.8198
768.36	88.5444
785.37	65.9177
794.95	66.0792
806.17	64.1647
831.80	79.3982
860.56	53.3044
896.60	54.8387
911.20	44.6996
934.06	36.8771
964.77	53.5148
968.97	53.5650
1001.03	36.6960
1078.86	40.1008
1120.29	49.8428
1155.19	40.7184
1173.23	45.6133
1238.11	51.1253
1280.96	38.7858
1332.51	28.3793
1377.67	24.6582
1401.50	28.2252
1407.98	22.0944
1460.80	24.0049
1509.23	12.0972
1588.20	17.4986
1620.50	15.3870
1729.60	12.5112
1764.49	14.3705

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701050

Total Uranium Activity	2.7882E-02	ug/g
Total Uranium Counting Unc.	5.5373E-02	ug/g
Total Uranium Tpu	5.5373E-08	ug/g
Total Uranium Mda	4.2668E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:08:59.90

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701051.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:07:11
Sample ID        : G198701051           Sample quantity  : 1.61180E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:02.87  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.98*	67	430	1.17	93.93	90	9	4.65E-03	61.2	
2	0	63.40*	85	600	1.03	126.74	123	9	5.87E-03	57.3	
3	4	74.95*	509	511	1.17	149.81	145	13	3.54E-02	8.9	2.02E+00
4	4	77.22*	650	429	1.03	154.35	145	13	4.52E-02	7.0	
5	2	84.24*	54	635	1.32	168.36	164	26	3.75E-03	82.2	2.06E+00
6	2	87.29*	277	599	1.39	174.46	164	26	1.92E-02	16.7	
7	2	90.06*	162	420	0.93	179.98	164	26	1.13E-02	22.1	
8	2	92.77*	281	454	1.23	185.39	164	26	1.95E-02	16.3	
9	0	105.77	58	313	0.93	211.38	209	6	4.04E-03	50.2	
10	0	109.06	88	464	1.42	217.94	215	9	6.14E-03	45.0	
11	0	129.15	91	546	0.72	258.08	254	9	6.35E-03	47.1	
12	0	144.56*	72	552	2.37	288.86	284	10	4.98E-03	64.8	
13	0	185.98*	290	596	1.20	371.61	367	11	2.01E-02	18.2	
14	0	195.02	53	519	1.47	389.68	383	11	3.70E-03	84.1	
15	0	209.25	203	378	0.98	418.10	414	9	1.41E-02	18.6	
16	4	238.64*	1531	312	1.10	476.81	471	18	1.06E-01	3.4	1.10E+00
17	4	241.74	472	393	1.92	483.02	471	18	3.28E-02	12.0	
18	0	270.17	171	228	1.87	539.81	536	8	1.19E-02	17.1	
19	0	277.45	83	311	1.27	554.36	549	10	5.79E-03	41.1	
20	0	295.26	586	269	1.24	589.96	585	10	4.07E-02	6.7	
21	0	300.01	99	219	1.11	599.45	596	8	6.88E-03	27.8	
22	0	328.07	51	233	1.53	655.50	650	10	3.55E-03	57.6	
23	0	338.35	295	304	1.29	676.06	671	12	2.05E-02	13.2	
24	0	352.01*	1055	320	1.41	703.36	698	13	7.33E-02	4.8	
25	0	408.97	71	170	0.87	817.18	812	10	4.90E-03	36.6	
26	0	424.05	22	138	1.32	847.33	842	9	1.56E-03	97.1	
27	0	441.40*	19	113	1.52	882.01	879	7	1.31E-03	107.0	
28	0	463.24	87	136	1.03	925.66	921	10	6.03E-03	27.4	
29	6	511.00*	199	162	2.65	1021.13	1012	37	1.38E-02	19.8	1.84E+00
30	6	519.94	40	75	1.50	1039.00	1012	37	2.78E-03	44.1	
31	6	523.25	21	49	1.63	1045.61	1012	37	1.44E-03	59.8	
32	0	562.33	39	43	1.77	1123.72	1121	6	2.69E-03	31.3	
33	0	583.32*	466	223	1.53	1165.69	1158	17	3.23E-02	8.9	
34	0	591.53	50	86	3.35	1182.10	1177	11	3.46E-03	39.4	
35	0	609.50*	735	177	1.49	1218.03	1212	14	5.11E-02	5.5	
36	0	662.63	52	146	1.09	1324.25	1315	13	3.60E-03	50.1	
37	0	666.12	27	77	1.53	1331.23	1328	8	1.90E-03	58.4	
38	0	716.71	16	71	0.67	1432.40	1426	10	1.10E-03	103.3	

Sample ID : G198701051 Acquisition date : 17-DEC-2007 12:07:11

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	728.09	111	83	1.06	1455.15	1449	12	7.73E-03	19.2	
40	0	755.63	15	66	0.85	1510.21	1504	10	1.05E-03	102.9	
41	6	768.37*	80	82	2.88	1535.69	1529	22	5.54E-03	27.4	1.48E+00
42	6	772.99	55	64	2.40	1544.93	1529	22	3.82E-03	33.8	
43	0	785.92	32	68	1.11	1570.80	1568	8	2.22E-03	48.0	
44	0	795.41	100	76	1.67	1589.78	1582	16	6.93E-03	22.0	
45	0	836.00	35	98	0.90	1670.94	1663	13	2.40E-03	61.4	
46	0	860.79	66	66	1.54	1720.53	1715	12	4.56E-03	27.7	
47	0	911.54*	354	73	1.46	1822.03	1816	14	2.46E-02	7.6	
48	0	934.45	48	62	2.48	1867.86	1861	12	3.31E-03	36.3	
49	4	964.74*	78	58	2.51	1928.45	1920	25	5.41E-03	34.5	1.34E+00
50	4	969.24	228	40	1.83	1937.45	1920	25	1.58E-02	8.6	
51	0	1014.42	30	34	3.53	2027.83	2021	11	2.06E-03	42.9	
52	0	1120.95*	175	33	1.48	2240.99	2235	14	1.22E-02	11.0	
53	0	1238.37	92	64	1.77	2475.97	2468	18	6.40E-03	22.7	
54	0	1357.42	8	26	3.90	2714.24	2705	12	5.33E-04	139.7	
55	3	1385.29	26	18	2.27	2770.04	2749	29	1.82E-03	43.8	1.56E+00
56	3	1387.84*	10	6	1.37	2775.14	2749	29	6.95E-04	75.3	
57	0	1403.03	19	34	2.46	2805.55	2797	12	1.32E-03	66.8	
58	0	1461.35*	565	24	1.78	2922.30	2914	16	3.93E-02	4.8	
59	0	1496.41	10	18	0.89	2992.49	2988	8	6.71E-04	82.8	
60	0	1510.95	24	38	1.64	3021.61	3015	16	1.68E-03	61.7	
61	0	1538.93	10	19	3.03	3077.63	3072	11	6.81E-04	92.3	
62	3	1588.41	37	4	2.59	3176.71	3171	23	2.57E-03	22.9	9.23E-01
63	3	1593.50	35	15	2.59	3186.91	3171	23	2.45E-03	27.0	
64	0	1623.19	36	17	7.98	3246.36	3237	22	2.50E-03	33.3	
65	0	1632.02	26	5	0.85	3264.05	3259	12	1.83E-03	26.6	
66	0	1662.32	26	2	3.18	3324.73	3320	10	1.79E-03	22.7	
67	0	1694.84	7	10	0.54	3389.86	3381	10	4.82E-04	93.4	
68	0	1709.73	9	2	1.52	3419.68	3416	7	6.44E-04	40.4	
69	0	1729.61	36	9	1.00	3459.51	3454	12	2.47E-03	23.9	
70	0	1765.18	134	11	1.46	3530.75	3525	12	9.31E-03	10.0	
71	0	1804.84	18	3	1.69	3610.20	3604	12	1.26E-03	30.2	
72	0	1842.63	11	2	1.54	3685.91	3682	8	7.59E-04	37.7	
73	0	1848.14	21	7	1.08	3696.95	3693	10	1.47E-03	32.4	
74	0	1875.73	8	9	1.08	3752.21	3743	12	5.43E-04	84.8	
75	0	1895.28	9	13	1.21	3791.38	3780	13	6.44E-04	86.4	
76	0	1909.04	9	5	3.41	3818.96	3813	10	6.55E-04	54.6	
77	0	1941.32	4	15	2.86	3883.63	3873	12	3.12E-04	177.8	
78	0	1993.49	6	14	0.89	3988.18	3980	11	3.89E-04	144.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701051       *
* Acquisition date : 17-DEC-2007 12:07:11 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:02.87     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701051           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.6118E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.802E+00	5.991E-01	2.129E-01	0.000E+00
CS-137	2.761E-02	2.718E-02	2.468E-02	0.000E+00
EU-155	4.253E-02	4.201E-02	7.454E-02	0.000E+00
TL-208	2.234E-01	4.144E-02	2.268E-02	0.000E+00
BI-212	4.622E-01	1.770E-01	1.758E-01	0.000E+00
PB-212	7.368E-01	6.449E-02	4.217E-02	0.000E+00
BI-214	6.707E-01	8.353E-02	4.885E-02	0.000E+00
PB-214	7.681E-01	8.381E-02	5.009E-02	0.000E+00
RA-223	2.829E-01	9.633E-02	1.363E-01	0.000E+00
AC-228	8.225E-01	1.442E-01	7.885E-02	0.000E+00
TH-234	8.109E-01	2.721E-01	3.222E-01	0.000E+00
U-235	1.031E-01	1.311E-01	1.526E-01	0.000E+00
NP-237	3.616E-01	1.254E-01	1.460E-01	0.000E+00
AM-243	1.393E-01	2.845E-02	3.285E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-5.400E-03		1.717E-02	2.789E-02	0.000E+00	NOT IDENT.
RH-101	7.688E-03		1.665E-02	2.616E-02	0.000E+00	NOT IDENT.
SB-125	1.862E-02		4.505E-02	7.006E-02	0.000E+00	NOT IDENT.
PO-209	1.576E-02		3.091E+00	5.122E+00	0.000E+00	NOT IDENT.
BI-211	4.910E-02		4.487E-01	6.802E-01	0.000E+00	NOT IDENT.
PA-233	-1.433E-02		2.664E-02	4.574E-02	0.000E+00	NOT IDENT.
PA-234M	1.887E-01		1.883E+00	3.080E+00	0.000E+00	NOT IDENT.
NP-236	9.243E-03		2.412E-02	4.305E-02	0.000E+00	NOT IDENT.
NP-239	-3.893E-02		9.086E-02	1.610E-01	0.000E+00	NOT IDENT.
AM-241	4.076E-02		5.076E-02	8.458E-02	0.000E+00	NOT IDENT.
CM-243	1.637E-02		4.172E-02	7.071E-02	0.000E+00	NOT IDENT.
AM-246	-6.955E-03		5.274E-02	8.785E-02	0.000E+00	NOT IDENT.
CF-249	7.887E-03		1.660E-02	2.956E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:09:01.01

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701051.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:07:11
Sample ID        : G198701051           Sample quantity  : 1.61180E+02 GRAM
Detector name    : GAM20                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:02.87  0.4%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	565	10.66*	1.286E+00	4.802E+00	4.802E+00	12.73
CS-137	661.66	52	85.10*	2.579E+00	2.747E-02	2.761E-02	100.47
EU-155	105.31	58	21.20*	7.743E+00	4.124E-02	4.253E-02	100.80
TL-208	277.36	83	6.31	5.044E+00	3.051E-01	3.051E-01	82.46
	510.77	199	22.60	3.200E+00	3.204E-01	3.204E-01	40.10
	583.19	466	84.50*	2.873E+00	2.234E-01	2.234E-01	18.93
	763.13	------	1.81	2.279E+00	------	Line Not Found	------
	860.56	66	12.42	2.045E+00	3.008E-01	3.008E-01	56.11
BI-212	727.33	111	11.80*	2.376E+00	4.622E-01	4.622E-01	39.07
	785.37	32	1.10	2.220E+00	1.526E+00	1.526E+00	96.36
	1620.50	------	1.49	1.195E+00	------	Line Not Found	------
PB-212	74.81	509	10.40	6.241E+00	9.137E-01	9.137E-01	20.84
	77.11	650	17.50	6.464E+00	6.695E-01	6.695E-01	17.76
	87.30	277	7.81	7.199E+00	5.741E-01	5.741E-01	35.39
	238.63	1531	43.30*	5.590E+00	7.368E-01	7.368E-01	8.93
	300.09	99	3.28	4.774E+00	7.370E-01	7.370E-01	55.89
BI-214	609.31	735	46.10*	2.769E+00	6.706E-01	6.707E-01	12.71
	768.36	80	4.94	2.265E+00	8.304E-01	8.305E-01	55.41
	806.17	------	1.22	2.170E+00	------	Line Not Found	------
	934.06	48	3.03	1.898E+00	9.651E-01	9.652E-01	73.14
	1120.29	175	15.10	1.608E+00	8.391E-01	8.392E-01	22.97
	1155.19	------	1.63	1.566E+00	------	Line Not Found	------
	1238.11	92	5.79	1.473E+00	1.259E+00	1.259E+00	45.97
	1280.96	------	1.43	1.431E+00	------	Line Not Found	------
	1377.67	------	4.00	1.347E+00	------	Line Not Found	------
	1401.50	19	1.27	1.327E+00	1.311E+00	1.311E+00	133.97
	1407.98	------	2.15	1.324E+00	------	Line Not Found	------
	1509.23	24	2.11	1.255E+00	1.062E+00	1.062E+00	123.69
	1729.60	36	2.92	1.149E+00	1.235E+00	1.235E+00	48.21
	1764.49	134	15.40	1.136E+00	8.917E-01	8.918E-01	21.16
PB-214	74.81	509	6.44	6.241E+00	1.475E+00	1.476E+00	20.84
	77.11	650	10.80	6.464E+00	1.085E+00	1.085E+00	17.76

Sample ID : G198701051 Acquisition date : 17-DEC-2007 12:07:11

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	277	4.84	7.199E+00	9.264E-01	9.265E-01	35.39
	242.00	472	7.43	5.542E+00	1.335E+00	1.336E+00	24.72
	295.22	586	19.30	4.828E+00	7.326E-01	7.327E-01	14.68
	351.93	1055	37.60*	4.254E+00	7.680E-01	7.681E-01	11.13
RA-223	269.46	171	13.70*	5.138E+00	2.829E-01	2.829E-01	34.75
AC-228	129.07	91	2.42	7.643E+00	5.755E-01	5.755E-01	94.45
	209.25	203	3.89	6.086E+00	1.001E+00	1.001E+00	37.59
	270.25	171	3.46	5.138E+00	1.120E+00	1.120E+00	34.75
	338.32	295	11.27	4.379E+00	6.949E-01	6.949E-01	27.06
	409.46	71	1.92	3.805E+00	1.125E+00	1.125E+00	73.33
	463.00	87	4.40	3.458E+00	6.649E-01	6.649E-01	55.08
	794.95	100	4.25	2.196E+00	1.245E+00	1.245E+00	44.68
	911.20	354	25.80*	1.941E+00	8.225E-01	8.225E-01	17.89
	964.77	78	4.99	1.843E+00	9.856E-01	9.856E-01	69.63
	968.97	228	15.80	1.835E+00	9.140E-01	9.140E-01	19.35
	1588.20	37	3.22	1.211E+00	1.106E+00	1.106E+00	46.49
TH-234	63.29	85	4.80	4.745E+00	4.323E-01	4.323E-01	115.04
	92.58	281	5.41*	7.450E+00	8.109E-01	8.109E-01	34.25
U-235	143.76	72	10.96*	7.383E+00	1.031E-01	1.031E-01	129.74
NP-237	86.48	277	12.40*	7.199E+00	3.616E-01	3.616E-01	35.39
AM-243	74.66	509	68.20*	6.241E+00	1.393E-01	1.393E-01	20.84

Flag: "*" = Keyline

Sample ID : G198701051 Acquisition date : 17-DEC-2007 12:07:11

Total number of lines in spectrum	78	
Number of unidentified lines	38	
Number of lines tentatively identified by NID	40	51.28%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.802E+00	4.802E+00	0.611E+00	12.73	
CS-137	9.47E+08S	1.01	2.747E-02	2.761E-02	2.774E-02	100.47	
EU-155	1.57E+08S	1.03	4.124E-02	4.253E-02	4.287E-02	100.80	
TL-208	4.43E+17S	1.00	2.234E-01	2.234E-01	0.423E-01	18.93	
BI-212	4.43E+17S	1.00	4.622E-01	4.622E-01	1.806E-01	39.07	
PB-212	4.43E+17S	1.00	7.368E-01	7.368E-01	0.658E-01	8.93	
BI-214	5.05E+10S	1.00	6.706E-01	6.707E-01	0.852E-01	12.71	
PB-214	5.05E+10S	1.00	7.680E-01	7.681E-01	0.855E-01	11.13	
RA-223	1.04E+12S	1.00	2.829E-01	2.829E-01	0.983E-01	34.75	
AC-228	4.43E+17S	1.00	8.225E-01	8.225E-01	1.472E-01	17.89	
TH-234	1.41E+17S	1.00	8.109E-01	8.109E-01	2.777E-01	34.25	
U-235	2.22E+16S	1.00	1.031E-01	1.031E-01	1.338E-01	129.74	
NP-237	6.75E+13S	1.00	3.616E-01	3.616E-01	1.280E-01	35.39	
AM-243	2.33E+11S	1.00	1.393E-01	1.393E-01	0.290E-01	20.84	
			---	---			
	Total Activity :		1.025E+01	1.025E+01			

Grand Total Activity : 1.025E+01 1.025E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701051 Acquisition date : 17-DEC-2007 12:07:11

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.98	67	430	1.17	93.93	90	9	4.65E-03	****	1.89E+00	
2	84.24	54	635	1.32	168.36	164	26	3.75E-03	****	7.02E+00	
2	90.06	162	420	0.93	179.98	164	26	1.13E-02	44.1	7.34E+00	
0	109.06	88	464	1.42	217.94	215	9	6.14E-03	90.0	7.77E+00	
0	185.98	290	596	1.20	371.61	367	11	2.01E-02	36.3	6.53E+00	
0	195.02	53	519	1.47	389.68	383	11	3.70E-03	****	6.35E+00	
0	328.07	51	233	1.53	655.50	650	10	3.55E-03	****	4.48E+00	
0	424.05	22	138	1.32	847.33	842	9	1.56E-03	****	3.70E+00	
0	441.40	19	113	1.52	882.01	879	7	1.31E-03	****	3.59E+00	
6	519.94	40	75	1.50	1039.00	1012	37	2.78E-03	88.2	3.16E+00	
6	523.25	21	49	1.63	1045.61	1012	37	1.44E-03	****	3.14E+00	
0	562.33	39	43	1.77	1123.72	1121	6	2.69E-03	62.7	2.96E+00	
0	591.53	50	86	3.35	1182.10	1177	11	3.46E-03	78.7	2.84E+00	
0	666.12	27	77	1.53	1331.23	1328	8	1.90E-03	****	2.57E+00	
0	716.71	16	71	0.67	1432.40	1426	10	1.10E-03	****	2.41E+00	
0	755.63	15	66	0.85	1510.21	1504	10	1.05E-03	****	2.30E+00	
6	772.99	55	64	2.40	1544.93	1529	22	3.82E-03	67.6	2.25E+00	
0	836.00	35	98	0.90	1670.94	1663	13	2.40E-03	****	2.10E+00	
0	1014.42	30	34	3.53	2027.83	2021	11	2.06E-03	85.7	1.76E+00	
0	1357.42	8	26	3.90	2714.24	2705	12	5.33E-04	****	1.36E+00	
3	1385.29	26	18	2.27	2770.04	2749	29	1.82E-03	87.6	1.34E+00	
3	1387.84	10	6	1.37	2775.14	2749	29	6.95E-04	****	1.34E+00	
0	1496.41	10	18	0.89	2992.49	2988	8	6.71E-04	****	1.26E+00	
0	1538.93	10	19	3.03	3077.63	3072	11	6.81E-04	****	1.24E+00	
3	1593.50	35	15	2.59	3186.91	3171	23	2.45E-03	54.0	1.21E+00	
0	1623.19	36	17	7.98	3246.36	3237	22	2.50E-03	66.5	1.19E+00	
0	1632.02	26	5	0.85	3264.05	3259	12	1.83E-03	53.2	1.19E+00	
0	1662.32	26	2	3.18	3324.73	3320	10	1.79E-03	45.5	1.18E+00	
0	1694.84	7	10	0.54	3389.86	3381	10	4.82E-04	****	1.16E+00	
0	1709.73	9	2	1.52	3419.68	3416	7	6.44E-04	80.9	1.16E+00	
0	1804.84	18	3	1.69	3610.20	3604	12	1.26E-03	60.5	1.12E+00	
0	1842.63	11	2	1.54	3685.91	3682	8	7.59E-04	75.5	1.11E+00	
0	1848.14	21	7	1.08	3696.95	3693	10	1.47E-03	64.7	1.11E+00	
0	1875.73	8	9	1.08	3752.21	3743	12	5.43E-04	****	1.10E+00	
0	1895.28	9	13	1.21	3791.38	3780	13	6.44E-04	****	1.10E+00	
0	1909.04	9	5	3.41	3818.96	3813	10	6.55E-04	****	1.10E+00	
0	1941.32	4	15	2.86	3883.63	3873	12	3.12E-04	****	1.09E+00	
0	1993.49	6	14	0.89	3988.18	3980	11	3.89E-04	****	1.08E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701051            *
* Acquisition date : 17-DEC-2007 12:07:11 Detector SN#    :                 *
* Detector ID      : GAM20                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:01:02.87     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701051           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.6118E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-SEP-2007 16:22:08 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.802E+00	5.991E-01	1.065E-01	5.991E-01
CS-137	2.761E-02	2.718E-02	1.235E-02	2.718E-02
EU-155	4.253E-02	4.201E-02	3.729E-02	4.201E-02
TL-208	2.234E-01	4.144E-02	1.135E-02	4.144E-02
BI-212	4.622E-01	1.770E-01	8.798E-02	1.770E-01
PB-212	7.368E-01	6.449E-02	2.110E-02	6.449E-02
BI-214	6.707E-01	8.353E-02	2.444E-02	8.353E-02
PB-214	7.681E-01	8.381E-02	2.506E-02	8.381E-02
RA-223	2.829E-01	9.633E-02	6.817E-02	9.633E-02
AC-228	8.225E-01	1.442E-01	3.945E-02	1.442E-01
TH-234	8.109E-01	2.721E-01	1.612E-01	2.721E-01
U-235	1.031E-01	1.311E-01	7.632E-02	1.311E-01
NP-237	3.616E-01	1.254E-01	7.305E-02	1.254E-01
AM-243	1.393E-01	2.845E-02	1.644E-02	2.845E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-5.400E-03	1.717E-02	1.395E-02	1.717E-02	NOT IDENT.
RH-101	7.688E-03	1.665E-02	1.309E-02	1.665E-02	NOT IDENT.
SB-125	1.862E-02	4.505E-02	3.505E-02	4.505E-02	NOT IDENT.
PO-209	1.576E-02	3.091E+00	2.562E+00	3.091E+00	NOT IDENT.
BI-211	4.910E-02	4.487E-01	3.403E-01	4.487E-01	NOT IDENT.
PA-233	-1.433E-02	2.664E-02	2.289E-02	2.664E-02	NOT IDENT.
PA-234M	1.887E-01	1.883E+00	1.541E+00	1.883E+00	NOT IDENT.
NP-236	9.243E-03	2.412E-02	2.154E-02	2.412E-02	NOT IDENT.
NP-239	-3.893E-02	9.086E-02	8.053E-02	9.086E-02	NOT IDENT.
AM-241	4.076E-02	5.076E-02	4.231E-02	5.076E-02	NOT IDENT.
CM-243	1.637E-02	4.172E-02	3.538E-02	4.172E-02	NOT IDENT.
AM-246	-6.955E-03	5.274E-02	4.395E-02	5.274E-02	NOT IDENT.
CF-249	7.887E-03	1.660E-02	1.479E-02	1.660E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	383.9048
63.29	472.6116
74.66	546.7363
74.81	546.8461
74.81	546.8461
77.11	542.8613
77.11	542.8613
86.48	477.2483
87.30	477.7277
87.30	477.7277
92.58	480.7564
98.44	422.5005
103.76	423.1447
105.31	404.2125
129.07	431.3745
143.76	447.3063
198.00	338.0541
209.25	381.8595
228.18	318.8060
238.63	313.1738
242.00	313.8525
269.46	279.3292
270.25	276.4632
277.36	255.5798
295.22	228.4434
300.09	217.6944
312.17	226.9084
338.32	215.5505
351.93	197.2163
387.59	166.6759
409.46	154.4172
427.87	147.0359
463.00	142.6656
510.77	104.0318
583.19	95.8532
609.31	123.3595
661.66	92.8045
727.33	78.0258
763.13	76.2622
768.36	73.1268
785.37	79.3646
794.95	73.6853
806.17	81.8024
831.80	69.4805
860.56	61.0194
896.60	66.6494
911.20	50.6824
934.06	70.3477
964.77	52.3945
968.97	52.4481
1001.03	55.9657
1078.86	56.9848
1120.29	49.7018
1155.19	52.5841
1173.23	64.6377
1238.11	55.6891
1280.96	47.7259
1332.51	38.0121
1377.67	24.3126
1401.50	31.9359
1407.98	24.1825
1460.80	28.4851
1509.23	22.9854
1588.20	21.6346
1620.50	16.7327
1729.60	15.8952
1764.49	10.2744

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701051

Total Uranium Activity	4.7720E-02	ug/g
Total Uranium Counting Unc.	6.0675E-02	ug/g
Total Uranium Tpu	6.0675E-08	ug/g
Total Uranium Mda	3.5315E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:02:57.39

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701052.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:02:29
Sample ID        : G198701052           Sample quantity  : 1.36000E+02 GRAM
Detector name    : GAM01                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.63  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.64*	43	353	1.43	127.33	124	8	3.01E-03	83.5	
2	2	75.03	355	602	1.76	150.11	141	18	2.47E-02	15.3	2.00E+00
3	2	77.22*	399	384	1.25	154.49	141	18	2.77E-02	10.4	
4	1	84.60	76	411	1.64	169.26	165	28	5.25E-03	46.4	1.38E+00
5	1	87.32	217	487	1.65	174.70	165	28	1.50E-02	20.5	
6	1	89.87	177	463	1.65	179.81	165	28	1.23E-02	25.0	
7	1	92.96*	181	432	1.66	185.98	165	28	1.26E-02	26.5	
8	0	128.81	113	429	2.04	257.72	253	11	7.85E-03	36.7	
9	0	143.62	82	398	1.91	287.34	282	10	5.68E-03	47.1	
10	0	186.27*	275	456	1.71	372.66	366	14	1.91E-02	18.6	
11	0	208.97	118	429	1.14	418.08	413	12	8.17E-03	36.4	
12	2	238.67*	1029	248	1.46	477.49	469	21	7.14E-02	4.4	7.14E-01
13	2	241.83	300	291	1.96	483.81	469	21	2.09E-02	15.2	
14	0	255.60*	38	414	4.61	511.35	498	18	2.66E-03	128.4	
15	0	270.96	47	348	1.88	542.08	534	13	3.26E-03	83.2	
16	0	277.57	97	223	1.08	555.31	550	11	6.71E-03	31.7	
17	0	295.18*	256	253	1.32	590.54	586	11	1.78E-02	14.5	
18	0	300.82	38	176	1.32	601.81	598	9	2.60E-03	66.3	
19	0	338.59	197	235	1.22	677.37	672	12	1.37E-02	17.1	
20	0	351.82*	570	261	1.34	703.84	696	16	3.96E-02	7.8	
21	0	410.09	26	130	0.55	820.41	814	9	1.81E-03	82.8	
22	0	463.65	97	129	2.70	927.55	921	13	6.73E-03	26.3	
23	0	511.10*	66	163	2.30	1022.46	1014	19	4.55E-03	61.1	
24	0	583.31*	276	135	1.55	1166.92	1160	15	1.92E-02	11.8	
25	0	609.42*	388	111	1.77	1219.14	1213	14	2.69E-02	8.2	
26	0	662.32	90	107	1.57	1324.97	1319	15	6.26E-03	27.3	
27	0	727.48	92	69	1.75	1455.29	1449	15	6.42E-03	22.0	
28	0	770.72	95	100	5.69	1541.79	1531	25	6.60E-03	30.1	
29	0	786.68	53	76	6.04	1573.72	1565	17	3.68E-03	40.2	
30	0	795.73	40	67	0.98	1591.81	1588	11	2.77E-03	42.6	
31	0	860.46	47	50	1.86	1721.29	1716	11	3.26E-03	32.5	
32	0	911.55*	175	91	1.86	1823.48	1814	14	1.21E-02	14.6	
33	0	934.62	28	33	1.44	1869.62	1865	11	1.95E-03	44.9	
34	0	965.19	57	22	1.62	1930.76	1926	9	3.93E-03	20.5	
35	0	969.35*	107	48	2.32	1939.09	1934	10	7.43E-03	17.2	
36	0	1002.10*	16	32	3.67	2004.59	1998	15	1.13E-03	93.2	
37	0	1075.07	15	25	2.36	2150.53	2145	10	1.04E-03	67.5	
38	6	1107.73	9	4	1.59	2215.86	2214	16	6.42E-04	40.5	3.24E+00

Sample ID : G198701052 Acquisition date : 17-DEC-2007 12:02:29

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	6	1110.74	30	15	2.56	2221.89	2214	16	2.10E-03	35.7	
40	0	1121.48*	89	61	1.87	2243.36	2234	19	6.18E-03	25.3	
41	0	1238.94	54	32	3.29	2478.29	2468	17	3.75E-03	28.1	
42	0	1308.52	9	22	1.68	2617.45	2609	12	6.52E-04	108.1	
43	0	1460.93*	285	26	1.70	2922.26	2913	18	1.98E-02	7.7	
44	0	1470.61	10	24	0.68	2941.62	2931	14	7.27E-04	104.5	
45	0	1588.13	20	9	0.82	3176.64	3172	11	1.41E-03	35.4	
46	0	1620.34	28	15	3.45	3241.05	3233	19	1.96E-03	37.3	
47	0	1692.38	16	7	1.03	3385.11	3377	14	1.14E-03	42.0	
48	0	1729.99	33	8	2.42	3460.32	3454	12	2.27E-03	25.3	
49	0	1764.91*	63	20	1.68	3530.16	3524	13	4.35E-03	22.4	
50	0	1873.29	12	8	1.69	3746.89	3739	13	8.00E-04	62.4	
51	0	1878.76*	6	7	1.39	3757.81	3751	13	4.03E-04	126.0	
52	0	1942.30	9	8	3.10	3884.88	3875	15	5.90E-04	78.1	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701052       *
* Acquisition date : 17-DEC-2007 12:02:29 Detector SN#    :                 *
* Detector ID      : GAM01                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.63     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701052           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.3600E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  7-MAR-2007 03:44:30 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.522E+00	5.676E-01	2.894E-01	0.000E+00
CS-137	6.960E-02	3.758E-02	2.810E-02	0.000E+00
TL-208	1.913E-01	4.628E-02	3.246E-02	0.000E+00
BI-212	5.564E-01	2.444E-01	2.434E-01	0.000E+00
PB-212	6.740E-01	7.335E-02	5.686E-02	0.000E+00
BI-214	5.113E-01	8.986E-02	6.796E-02	0.000E+00
PB-214	5.826E-01	9.573E-02	6.249E-02	0.000E+00
RA-223	1.071E-01	1.747E-01	1.752E-01	0.000E+00
AC-228	5.914E-01	1.778E-01	1.312E-01	0.000E+00
PA-234M	1.844E+00	3.373E+00	3.815E+00	0.000E+00
TH-234	7.464E-01	3.912E-01	4.322E-01	0.000E+00
U-235	1.568E-01	1.451E-01	1.936E-01	0.000E+00
NP-237	4.125E-01	1.688E-01	1.999E-01	0.000E+00
AM-243	1.522E-01	4.720E-02	4.612E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-4.000E-03		2.245E-02	3.658E-02	0.000E+00	NOT IDENT.
RH-101	-6.094E-03		2.356E-02	3.459E-02	0.000E+00	NOT IDENT.
SB-125	-2.009E-02		5.563E-02	9.201E-02	0.000E+00	NOT IDENT.
EU-155	7.566E-02		5.748E-02	1.075E-01	0.000E+00	NOT IDENT.
PO-209	-1.452E+00		3.705E+00	6.024E+00	0.000E+00	NOT IDENT.
BI-211	-2.332E-01		5.568E-01	9.123E-01	0.000E+00	NOT IDENT.
PA-233	1.896E-02		3.746E-02	6.593E-02	0.000E+00	NOT IDENT.
NP-236	2.935E-02		3.606E-02	5.885E-02	0.000E+00	NOT IDENT.
NP-239	8.715E-03		1.287E-01	2.255E-01	0.000E+00	NOT IDENT.
AM-241	6.101E-02		9.199E-02	1.447E-01	0.000E+00	NOT IDENT.
CM-243	5.826E-04		5.251E-02	9.491E-02	0.000E+00	NOT IDENT.
AM-246	2.365E-02		8.427E-02	1.254E-01	0.000E+00	NOT IDENT.
CF-249	9.435E-03		2.312E-02	4.018E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:02:58.57

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701052.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:02:29
Sample ID        : G198701052           Sample quantity  : 1.36000E+02 GRAM
Detector name    : GAM01                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.63  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	285	10.66*	1.047E+00	3.522E+00	3.522E+00	16.45
CS-137	661.66	90	85.10*	2.111E+00	6.924E-02	6.960E-02	55.10
TL-208	277.36	97	6.31	4.335E+00	4.877E-01	4.877E-01	63.81
	510.77	66	22.60	2.640E+00	1.515E-01	1.515E-01	122.30
	583.19	276	84.50*	2.359E+00	1.913E-01	1.913E-01	24.69
	763.13	------	1.81	1.860E+00	------	Line Not Found	------
	860.56	47	12.42	1.667E+00	3.128E-01	3.128E-01	65.75
BI-212	727.33	92	11.80*	1.942E+00	5.564E-01	5.564E-01	44.81
	785.37	53	1.10	1.809E+00	3.679E+00	3.679E+00	80.81
	1620.50	28	1.49	9.728E-01	2.684E+00	2.684E+00	74.88
PB-212	74.81	355	10.40	4.724E+00	9.982E-01	9.982E-01	31.64
	77.11	399	17.50	4.963E+00	6.345E-01	6.345E-01	22.36
	87.30	217	7.81	5.847E+00	6.549E-01	6.549E-01	41.76
	238.63	1029	43.30*	4.864E+00	6.740E-01	6.740E-01	11.10
	300.09	38	3.28	4.069E+00	3.878E-01	3.878E-01	132.85
BI-214	609.31	388	46.10*	2.271E+00	5.113E-01	5.113E-01	17.93
	768.36	------	4.94	1.848E+00	------	Line Not Found	------
	806.17	------	1.22	1.770E+00	------	Line Not Found	------
	934.06	28	3.03	1.545E+00	8.293E-01	8.294E-01	90.21
	1120.29	89	15.10	1.309E+00	6.219E-01	6.219E-01	51.03
	1155.19	------	1.63	1.274E+00	------	Line Not Found	------
	1238.11	54	5.79	1.198E+00	1.074E+00	1.074E+00	56.57
	1280.96	------	1.43	1.164E+00	------	Line Not Found	------
	1377.67	------	4.00	1.096E+00	------	Line Not Found	------
	1401.50	------	1.27	1.081E+00	------	Line Not Found	------
	1407.98	------	2.15	1.077E+00	------	Line Not Found	------
	1509.23	------	2.11	1.022E+00	------	Line Not Found	------
	1729.60	33	2.92	9.348E-01	1.649E+00	1.650E+00	50.89
	1764.49	63	15.40	9.246E-01	6.077E-01	6.078E-01	45.23
PB-214	74.81	355	6.44	4.724E+00	1.612E+00	1.612E+00	31.64
	77.11	399	10.80	4.963E+00	1.028E+00	1.028E+00	22.36
	87.30	217	4.84	5.847E+00	1.057E+00	1.057E+00	41.76

Sample ID : G198701052 Acquisition date : 17-DEC-2007 12:02:29

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	300	7.43	4.816E+00	1.159E+00	1.159E+00	31.26
	295.22	256	19.30	4.131E+00	4.437E-01	4.437E-01	29.75
	351.93	570	37.60*	3.591E+00	5.826E-01	5.826E-01	16.77
RA-223	269.46	47	13.70*	4.416E+00	1.071E-01	1.071E-01	166.47
AC-228	129.07	113	2.42	6.752E+00	9.544E-01	9.544E-01	73.71
	209.25	118	3.89	5.352E+00	7.802E-01	7.802E-01	73.08
	270.25	47	3.46	4.416E+00	4.241E-01	4.241E-01	166.47
	338.32	197	11.27	3.703E+00	6.526E-01	6.526E-01	34.86
	409.46	26	1.92	3.170E+00	5.906E-01	5.906E-01	165.64
	463.00	97	4.40	2.865E+00	1.061E+00	1.061E+00	52.93
	794.95	40	4.25	1.791E+00	7.238E-01	7.238E-01	85.57
	911.20	175	25.80*	1.581E+00	5.914E-01	5.914E-01	30.68
	964.77	57	4.99	1.500E+00	1.044E+00	1.044E+00	42.02
	968.97	107	15.80	1.494E+00	6.253E-01	6.253E-01	35.51
	1588.20	20	3.22	9.859E-01	8.830E-01	8.830E-01	71.04
PA-234M	1001.03	16	0.84*	1.450E+00	1.844E+00	1.844E+00	186.68
TH-234	63.29	43	4.80	3.228E+00	3.865E-01	3.865E-01	167.19
	92.58	181	5.41*	6.191E+00	7.464E-01	7.464E-01	53.49
U-235	143.76	82	10.96*	6.572E+00	1.568E-01	1.568E-01	94.43
NP-237	86.48	217	12.40*	5.847E+00	4.125E-01	4.125E-01	41.76
AM-243	74.66	355	68.20*	4.724E+00	1.522E-01	1.522E-01	31.64

Flag: "*" = Keyline

Sample ID : G198701052 Acquisition date : 17-DEC-2007 12:02:29

Total number of lines in spectrum 52
Number of unidentified lines 14
Number of lines tentatively identified by NID 38 73.08%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.522E+00	3.522E+00	0.579E+00	16.45	
CS-137	9.47E+08S	1.01	6.924E-02	6.960E-02	3.835E-02	55.10	
TL-208	4.43E+17S	1.00	1.913E-01	1.913E-01	0.472E-01	24.69	
BI-212	4.43E+17S	1.00	5.564E-01	5.564E-01	2.494E-01	44.81	
PB-212	4.43E+17S	1.00	6.740E-01	6.740E-01	0.748E-01	11.10	
BI-214	5.05E+10S	1.00	5.113E-01	5.113E-01	0.917E-01	17.93	
PB-214	5.05E+10S	1.00	5.826E-01	5.826E-01	0.977E-01	16.77	
RA-223	1.04E+12S	1.00	1.071E-01	1.071E-01	1.783E-01	166.47	
AC-228	4.43E+17S	1.00	5.914E-01	5.914E-01	1.814E-01	30.68	
PA-234M	1.41E+17S	1.00	1.844E+00	1.844E+00	3.442E+00	186.68	
TH-234	1.41E+17S	1.00	7.464E-01	7.464E-01	3.992E-01	53.49	
U-235	2.22E+16S	1.00	1.568E-01	1.568E-01	1.481E-01	94.43	
NP-237	6.75E+13S	1.00	4.125E-01	4.125E-01	1.722E-01	41.76	
AM-243	2.33E+11S	1.00	1.522E-01	1.522E-01	0.482E-01	31.64	
			---	---			
	Total Activity :		1.012E+01	1.012E+01			

Grand Total Activity : 1.012E+01 1.012E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701052 Acquisition date : 17-DEC-2007 12:02:29

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
1	84.60	76	411	1.64	169.26	165	28	5.25E-03	92.8	5.64E+00	
1	89.87	177	463	1.65	179.81	165	28	1.23E-02	50.1	6.02E+00	
0	186.27	275	456	1.71	372.66	366	14	1.91E-02	37.3	5.77E+00	
0	255.60	38	414	4.61	511.35	498	18	2.66E-03	****	4.62E+00	
0	770.72	95	100	5.69	1541.79	1531	25	6.60E-03	60.3	1.84E+00	
0	1075.07	15	25	2.36	2150.53	2145	10	1.04E-03	****	1.36E+00	
6	1107.73	9	4	1.59	2215.86	2214	16	6.42E-04	81.0	1.32E+00	
6	1110.74	30	15	2.56	2221.89	2214	16	2.10E-03	71.5	1.32E+00	
0	1308.52	9	22	1.68	2617.45	2609	12	6.52E-04	****	1.14E+00	
0	1470.61	10	24	0.68	2941.62	2931	14	7.27E-04	****	1.04E+00	
0	1692.38	16	7	1.03	3385.11	3377	14	1.14E-03	84.1	9.47E-01	
0	1873.29	12	8	1.69	3746.89	3739	13	8.00E-04	****	8.98E-01	
0	1878.76	6	7	1.39	3757.81	3751	13	4.03E-04	****	8.97E-01	
0	1942.30	9	8	3.10	3884.88	3875	15	5.90E-04	****	8.86E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701052            *
* Acquisition date : 17-DEC-2007 12:02:29 Detector SN#    :                 *
* Detector ID      : GAM01                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:01.63     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701052           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.3600E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  7-MAR-2007 03:44:30 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.522E+00	5.676E-01	1.448E-01	5.676E-01
CS-137	6.960E-02	3.758E-02	1.406E-02	3.758E-02
TL-208	1.913E-01	4.628E-02	1.624E-02	4.628E-02
BI-212	5.564E-01	2.444E-01	1.217E-01	2.444E-01
PB-212	6.740E-01	7.335E-02	2.844E-02	7.335E-02
BI-214	5.113E-01	8.986E-02	3.400E-02	8.986E-02
PB-214	5.826E-01	9.573E-02	3.126E-02	9.573E-02
RA-223	1.071E-01	1.747E-01	8.766E-02	1.747E-01
AC-228	5.914E-01	1.778E-01	6.562E-02	1.778E-01
PA-234M	1.844E+00	3.373E+00	1.909E+00	3.373E+00
TH-234	7.464E-01	3.912E-01	2.162E-01	3.912E-01
U-235	1.568E-01	1.451E-01	9.686E-02	1.451E-01
NP-237	4.125E-01	1.688E-01	1.000E-01	1.688E-01
AM-243	1.522E-01	4.720E-02	2.307E-02	4.720E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-4.000E-03	2.245E-02	1.830E-02	2.245E-02	NOT IDENT.
RH-101	-6.094E-03	2.356E-02	1.731E-02	2.356E-02	NOT IDENT.
SB-125	-2.009E-02	5.563E-02	4.603E-02	5.563E-02	NOT IDENT.
EU-155	7.566E-02	5.748E-02	5.379E-02	5.748E-02	NOT IDENT.
PO-209	-1.452E+00	3.705E+00	3.014E+00	3.705E+00	NOT IDENT.
BI-211	-2.332E-01	5.568E-01	4.564E-01	5.568E-01	NOT IDENT.
PA-233	1.896E-02	3.746E-02	3.298E-02	3.746E-02	NOT IDENT.
NP-236	2.935E-02	3.606E-02	2.944E-02	3.606E-02	NOT IDENT.
NP-239	8.715E-03	1.287E-01	1.128E-01	1.287E-01	NOT IDENT.
AM-241	6.101E-02	9.199E-02	7.238E-02	9.199E-02	NOT IDENT.
CM-243	5.826E-04	5.251E-02	4.748E-02	5.251E-02	NOT IDENT.
AM-246	2.365E-02	8.427E-02	6.274E-02	8.427E-02	NOT IDENT.
CF-249	9.435E-03	2.312E-02	2.010E-02	2.312E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	356.4304
63.29	429.8741
74.66	469.4544
74.81	469.5254
74.81	469.5254
77.11	487.7347
77.11	487.7347
86.48	447.8857
87.30	448.2236
87.30	448.2236
92.58	454.2028
98.44	400.8616
103.76	449.4638
105.31	397.0941
129.07	417.4818
143.76	430.6050
198.00	393.4957
209.25	350.9847
228.18	331.8143
238.63	323.6581
242.00	324.2052
269.46	256.9735
270.25	257.0669
277.36	222.5110
295.22	263.3852
300.09	296.3013
312.17	209.5208
338.32	204.5318
351.93	162.8459
387.59	162.9614
409.46	180.2619
427.87	157.8150
463.00	135.8002
510.77	119.5026
583.19	97.6714
609.31	118.2531
661.66	59.2069
727.33	73.1537
763.13	55.6553
768.36	64.0267
785.37	69.2267
794.95	59.4678
806.17	74.5270
831.80	72.9599
860.56	56.3247
896.60	56.7622
911.20	67.9752
934.06	56.1861
964.77	96.9214
968.97	49.3838
1001.03	51.4742
1078.86	46.8403
1120.29	47.0160
1155.19	40.4925
1173.23	51.3105
1238.11	48.6438
1280.96	42.9277
1332.51	33.8781
1377.67	28.4347
1401.50	30.4431
1407.98	37.1392
1460.80	25.1990
1509.23	25.1394
1588.20	30.3156
1620.50	21.6125
1729.60	15.9531
1764.49	15.0251

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701052

Total Uranium Activity	7.2553E-02	ug/g
Total Uranium Counting Unc.	6.7139E-02	ug/g
Total Uranium Tpu	6.7139E-08	ug/g
Total Uranium Mda	4.4818E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 04:48:43.27

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701053.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 16-DEC-2007 16:48:09
Sample ID        : G198701053           Sample quantity  : 6.90300E+01 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 12:00:00.00        Elapsed real time: 0 12:00:05.21  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.22*	26	587	0.70	105.90	104	5	5.99E-04	209.9	
2	0	63.01*	125	1241	1.14	125.46	122	9	2.90E-03	62.7	
3	8	73.74*	187	998	1.87	146.91	143	17	4.33E-03	39.5	5.06E+00
4	8	74.65*	687	996	1.22	148.73	143	17	1.59E-02	11.0	
5	8	76.91*	1257	1131	1.27	153.25	143	17	2.91E-02	6.5	
6	3	83.92*	108	1056	1.14	167.26	163	19	2.51E-03	65.5	1.66E+00
7	3	86.96	422	1117	1.15	173.33	163	19	9.77E-03	13.9	
8	3	89.65	176	1006	0.95	178.71	163	19	4.07E-03	28.8	
9	0	92.50*	315	1248	1.45	184.41	181	8	7.29E-03	31.0	
10	0	105.06	102	687	1.36	209.53	207	6	2.35E-03	42.0	
11	0	128.60	174	1038	1.26	256.58	253	9	4.04E-03	34.1	
12	0	139.52*	34	776	2.95	278.40	276	7	7.84E-04	184.5	
13	0	143.43*	106	892	1.48	286.22	283	8	2.45E-03	61.1	
14	0	153.77	141	968	2.13	306.90	303	9	3.25E-03	40.8	
15	0	162.96*	33	717	1.26	325.26	323	7	7.55E-04	174.5	
16	0	185.47*	374	1105	1.40	370.27	365	11	8.66E-03	24.5	
17	0	209.47	195	1036	1.34	418.26	411	10	4.51E-03	31.8	
18	0	217.12	55	678	1.07	433.55	430	8	1.27E-03	83.5	
19	4	238.40*	2267	602	1.24	476.09	470	19	5.25E-02	3.8	1.11E+00
20	4	241.22	533	1002	2.21	481.73	470	19	1.23E-02	16.3	
21	0	270.24*	101	788	1.02	539.75	534	12	2.34E-03	74.0	
22	0	276.38	166	714	2.24	552.02	547	11	3.83E-03	32.1	
23	0	294.85*	414	750	1.44	588.94	584	11	9.59E-03	16.8	
24	0	299.50*	13	835	1.73	598.24	595	13	3.10E-04	544.8	
25	0	327.92	160	554	2.75	655.06	650	10	3.70E-03	28.7	
26	0	338.05*	404	660	1.51	675.32	670	11	9.36E-03	15.9	
27	0	351.70*	816	524	1.43	702.60	698	10	1.89E-02	7.7	
28	0	355.62	39	376	0.52	710.44	708	8	9.03E-04	87.6	
29	0	413.36	42	351	0.97	825.88	823	9	9.75E-04	81.8	
30	0	462.55*	161	383	1.38	924.24	919	11	3.72E-03	32.4	
31	0	510.51*	206	719	2.44	1020.14	1011	20	4.77E-03	51.5	
32	0	519.66	65	304	3.60	1038.44	1034	11	1.50E-03	53.9	
33	0	566.13	30	199	1.09	1131.36	1128	7	6.96E-04	80.4	
34	0	569.96*	56	369	3.32	1139.03	1134	13	1.29E-03	92.4	
35	0	582.81*	632	384	1.66	1164.72	1160	11	1.46E-02	9.0	
36	0	608.84*	477	526	1.69	1216.77	1210	13	1.11E-02	14.7	
37	0	661.46	62	380	1.51	1321.99	1317	12	1.44E-03	63.8	
38	0	699.48	92	397	3.93	1398.04	1392	15	2.13E-03	48.2	

Sample ID : G198701053 Acquisition date : 16-DEC-2007 16:48:09

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	726.82	246	338	1.51	1452.71	1444	16	5.69E-03	17.9	
40	0	747.50	55	167	2.32	1494.06	1489	10	1.26E-03	47.1	
41	0	785.14	60	279	1.16	1569.35	1561	14	1.39E-03	60.6	
42	0	794.17	132	232	1.78	1587.39	1581	14	3.06E-03	25.9	
43	0	859.89*	104	225	1.62	1718.85	1713	13	2.40E-03	42.3	
44	0	886.82	6	183	1.16	1772.70	1768	12	1.33E-04	472.1	
45	0	910.65*	551	248	1.87	1820.36	1812	15	1.27E-02	9.2	
46	1	964.19	119	163	2.35	1927.46	1922	29	2.75E-03	20.7	1.45E+00
47	1	968.50*	324	182	2.25	1936.08	1922	29	7.50E-03	13.3	
48	1	973.64	57	90	2.13	1946.36	1922	29	1.31E-03	35.6	
49	0	1000.66*	85	136	1.22	2000.40	1992	17	1.96E-03	46.2	
50	0	1042.08	103	219	8.10	2083.25	2073	23	2.39E-03	38.5	
51	0	1119.75	126	232	2.00	2238.62	2233	13	2.92E-03	26.5	
52	6	1137.69	44	221	3.93	2274.51	2263	25	1.02E-03	91.9	1.15E+00
53	6	1142.41	26	67	1.66	2283.96	2263	25	5.94E-04	61.0	
54	3	1177.92	40	50	2.63	2354.99	2351	20	9.34E-04	34.1	6.28E+00
55	3	1180.43	78	98	2.47	2360.00	2351	20	1.81E-03	29.9	
56	0	1219.67	20	105	3.07	2438.51	2429	12	4.59E-04	105.7	
57	0	1238.43	46	126	2.06	2476.03	2470	12	1.06E-03	51.4	
58	0	1459.57*	109	94	2.56	2918.47	2910	17	2.52E-03	31.6	
59	0	1495.87	39	88	2.42	2991.10	2982	14	9.14E-04	52.7	
60	0	1535.46	44	79	0.65	3070.32	3061	21	1.01E-03	53.1	
61	0	1551.01	27	80	0.69	3101.44	3092	16	6.25E-04	76.5	
62	0	1587.84	127	110	2.17	3175.13	3164	22	2.94E-03	22.8	
63	0	1629.18	43	56	0.82	3257.85	3253	12	1.00E-03	37.3	
64	3	1756.68	46	22	2.86	3513.00	3498	68	1.07E-03	34.2	2.38E+00
65	3	1763.58*	132	44	3.81	3526.82	3498	68	3.05E-03	21.6	
66	3	1774.22	43	62	3.82	3548.10	3498	68	9.92E-04	45.5	
67	0	1790.51	21	97	7.26	3580.70	3566	24	4.87E-04	125.1	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701053       *
* Acquisition date : 16-DEC-2007 16:48:09 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 12:00:05.21     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701053           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 6.9030E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.631E-01	2.884E-01	2.170E-01	0.000E+00
CS-137	1.735E-02	2.177E-02	2.307E-02	0.000E+00
EU-155	4.895E-02	4.046E-02	6.631E-02	0.000E+00
TL-208	1.606E-01	3.082E-02	2.342E-02	0.000E+00
BI-212	5.302E-01	1.925E-01	1.690E-01	0.000E+00
PB-212	6.518E-01	6.139E-02	3.575E-02	0.000E+00
BI-214	2.298E-01	6.847E-02	4.595E-02	0.000E+00
PB-214	3.355E-01	5.390E-02	4.337E-02	0.000E+00
RA-223	9.811E-02	1.424E-01	1.112E-01	0.000E+00
AC-228	6.570E-01	1.351E-01	8.336E-02	0.000E+00
PA-234M	3.361E+00	3.057E+00	2.450E+00	0.000E+00
TH-234	6.100E-01	3.743E-01	2.840E-01	0.000E+00
U-235	9.689E-02	1.161E-01	1.198E-01	0.000E+00
NP-237	3.731E-01	1.067E-01	1.326E-01	0.000E+00
AM-243	1.313E-01	2.997E-02	2.733E-02	0.000E+00
CM-243	4.400E-02	3.637E-02	5.797E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error	MDA (pCi/GRAM)		Ided
CO-60	1.273E-02	1.590E-02	2.334E-02	0.000E+00	NOT IDENT.
RH-101	-1.444E-02	2.084E-02	2.304E-02	0.000E+00	NOT IDENT.
SB-125	-1.966E-02	3.628E-02	5.680E-02	0.000E+00	NOT IDENT.
PO-209	-7.051E-01	2.768E+00	4.436E+00	0.000E+00	NOT IDENT.
BI-211	7.193E-02	3.927E-01	6.569E-01	0.000E+00	NOT IDENT.
PA-233	6.412E-03	2.579E-02	4.224E-02	0.000E+00	NOT IDENT.
NP-236	-5.072E-03	2.922E-02	3.684E-02	0.000E+00	NOT IDENT.
NP-239	-4.678E-02	9.189E-02	1.418E-01	0.000E+00	NOT IDENT.
AM-241	-6.519E-03	6.485E-02	7.669E-02	0.000E+00	NOT IDENT.
AM-246	-4.213E-02	5.022E-02	7.814E-02	0.000E+00	NOT IDENT.
CF-249	1.149E-02	1.556E-02	2.556E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 04:48:44.24

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701053.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 16-DEC-2007 16:48:09
Sample ID        : G198701053           Sample quantity  : 6.90300E+01 GRAM
Detector name    : GAM22                Detector geometry: CAN
Elapsed live time: 0 12:00:00.00        Elapsed real time: 0 12:00:05.21  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	109	10.66*	1.997E+00	4.631E-01	4.631E-01	63.55
CS-137	661.66	62	85.10*	3.836E+00	1.727E-02	1.735E-02	127.99
EU-155	105.31	102	21.20*	9.139E+00	4.748E-02	4.895E-02	84.35
TL-208	277.36	166	6.31	6.722E+00	3.539E-01	3.539E-01	64.53
	510.77	206	22.60	4.633E+00	1.783E-01	1.783E-01	103.17
	583.19	632	84.50*	4.219E+00	1.606E-01	1.606E-01	19.58
	763.13	------	1.81	3.420E+00	------	Line Not Found	------
	860.56	104	12.42	3.094E+00	2.444E-01	2.444E-01	85.23
BI-212	727.33	246	11.80*	3.559E+00	5.302E-01	5.302E-01	37.04
	785.37	60	1.10	3.341E+00	1.479E+00	1.479E+00	121.50
	1620.50	------	1.49	1.873E+00	------	Line Not Found	------
PB-212	74.81	687	10.40	6.960E+00	8.607E-01	8.607E-01	23.30
	77.11	1257	17.50	7.256E+00	8.973E-01	8.973E-01	15.24
	87.30	422	7.81	8.272E+00	5.923E-01	5.923E-01	29.20
	238.63	2267	43.30*	7.279E+00	6.518E-01	6.518E-01	9.61
	300.09	13	3.28	6.428E+00	5.755E-02	5.755E-02	1089.71
BI-214	609.31	477	46.10*	4.085E+00	2.298E-01	2.298E-01	30.40
	768.36	------	4.94	3.401E+00	------	Line Not Found	------
	806.17	------	1.22	3.268E+00	------	Line Not Found	------
	934.06	------	3.03	2.880E+00	------	Line Not Found	------
	1120.29	126	15.10	2.461E+00	3.080E-01	3.081E-01	53.44
	1155.19	------	1.63	2.397E+00	------	Line Not Found	------
	1238.11	46	5.79	2.262E+00	3.183E-01	3.183E-01	103.00
	1280.96	------	1.43	2.201E+00	------	Line Not Found	------
	1377.67	------	4.00	2.081E+00	------	Line Not Found	------
	1401.50	------	1.27	2.055E+00	------	Line Not Found	------
	1407.98	------	2.15	2.048E+00	------	Line Not Found	------
	1509.23	------	2.11	1.953E+00	------	Line Not Found	------
	1729.60	------	2.92	1.815E+00	------	Line Not Found	------
	1764.49	132	15.40	1.801E+00	4.303E-01	4.304E-01	43.65
PB-214	74.81	687	6.44	6.960E+00	1.390E+00	1.390E+00	23.30
	77.11	1257	10.80	7.256E+00	1.454E+00	1.454E+00	15.24

Sample ID : G198701053 Acquisition date : 16-DEC-2007 16:48:09

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	87.30	422	4.84	8.272E+00	9.557E-01	9.558E-01	29.20
	242.00	533	7.43	7.234E+00	8.990E-01	8.991E-01	33.11
	295.22	414	19.30	6.485E+00	3.000E-01	3.001E-01	34.08
	351.93	816	37.60*	5.861E+00	3.355E-01	3.355E-01	16.39
RA-223	269.46	101	13.70*	6.805E+00	9.811E-02	9.811E-02	148.07
AC-228	129.07	174	2.42	9.242E+00	7.065E-01	7.065E-01	68.56
	209.25	195	3.89	7.776E+00	5.837E-01	5.837E-01	63.92
	270.25	101	3.46	6.805E+00	3.885E-01	3.885E-01	148.07
	338.32	404	11.27	5.998E+00	5.420E-01	5.420E-01	32.41
	409.46	------	1.92	5.348E+00	------	Line Not Found	------
	463.00	161	4.40	4.949E+00	6.690E-01	6.690E-01	65.08
	794.95	132	4.25	3.309E+00	8.515E-01	8.515E-01	52.70
	911.20	551	25.80*	2.945E+00	6.570E-01	6.570E-01	20.99
	964.77	119	4.99	2.802E+00	7.690E-01	7.690E-01	42.46
	968.97	324	15.80	2.791E+00	6.656E-01	6.656E-01	28.25
	1588.20	127	3.22	1.894E+00	1.887E+00	1.887E+00	46.07
PA-234M	1001.03	85	0.84*	2.713E+00	3.361E+00	3.361E+00	92.80
TH-234	63.29	125	4.80	5.025E+00	4.706E-01	4.706E-01	125.54
	92.58	315	5.41*	8.649E+00	6.100E-01	6.100E-01	62.61
U-235	143.76	106	10.96*	9.050E+00	9.689E-02	9.689E-02	122.27
NP-237	86.48	422	12.40*	8.272E+00	3.731E-01	3.731E-01	29.20
AM-243	74.66	687	68.20*	6.960E+00	1.312E-01	1.313E-01	23.30
CM-243	103.76	102	23.00*	9.139E+00	4.376E-02	4.400E-02	84.35

Flag: "*" = Keyline

Sample ID : G198701053 Acquisition date : 16-DEC-2007 16:48:09

Total number of lines in spectrum	67	
Number of unidentified lines	32	
Number of lines tentatively identified by NID	35	52.24%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.631E-01	4.631E-01	2.943E-01	63.55	
CS-137	9.47E+08S	1.01	1.727E-02	1.735E-02	2.221E-02	127.99	
EU-155	1.57E+08S	1.03	4.748E-02	4.895E-02	4.129E-02	84.35	
TL-208	4.43E+17S	1.00	1.606E-01	1.606E-01	0.314E-01	19.58	
BI-212	4.43E+17S	1.00	5.302E-01	5.302E-01	1.964E-01	37.04	
PB-212	4.43E+17S	1.00	6.518E-01	6.518E-01	0.626E-01	9.61	
BI-214	5.05E+10S	1.00	2.298E-01	2.298E-01	0.699E-01	30.40	
PB-214	5.05E+10S	1.00	3.355E-01	3.355E-01	0.550E-01	16.39	
RA-223	1.04E+12S	1.00	9.811E-02	9.811E-02	14.53E-02	148.07	
AC-228	4.43E+17S	1.00	6.570E-01	6.570E-01	1.379E-01	20.99	
PA-234M	1.41E+17S	1.00	3.361E+00	3.361E+00	3.119E+00	92.80	
TH-234	1.41E+17S	1.00	6.100E-01	6.100E-01	3.819E-01	62.61	
U-235	2.22E+16S	1.00	9.689E-02	9.689E-02	11.85E-02	122.27	
NP-237	6.75E+13S	1.00	3.731E-01	3.731E-01	1.089E-01	29.20	
AM-243	2.33E+11S	1.00	1.312E-01	1.313E-01	0.306E-01	23.30	
CM-243	8.99E+08S	1.01	4.376E-02	4.400E-02	3.711E-02	84.35	
		Total Activity :	7.807E+00	7.809E+00			

Grand Total Activity : 7.807E+00 7.809E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701053 Acquisition date : 16-DEC-2007 16:48:09

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.22	26	587	0.70	105.90	104	5	5.99E-04	****	3.02E+00	
8	73.74	187	998	1.87	146.91	143	17	4.33E-03	79.1	6.83E+00	
3	83.92	108	1056	1.14	167.26	163	19	2.51E-03	****	8.01E+00	
3	89.65	176	1006	0.95	178.71	163	19	4.07E-03	57.6	8.47E+00	
0	139.52	34	776	2.95	278.40	276	7	7.84E-04	****	9.11E+00	
0	153.77	141	968	2.13	306.90	303	9	3.25E-03	81.6	8.87E+00	
0	162.96	33	717	1.26	325.26	323	7	7.55E-04	****	8.69E+00	
0	185.47	374	1105	1.40	370.27	365	11	8.66E-03	49.0	8.24E+00	
0	217.12	55	678	1.07	433.55	430	8	1.27E-03	****	7.64E+00	
0	327.92	160	554	2.75	655.06	650	10	3.70E-03	57.4	6.10E+00	
0	355.62	39	376	0.52	710.44	708	8	9.03E-04	****	5.82E+00	
0	413.36	42	351	0.97	825.88	823	9	9.75E-04	****	5.32E+00	
0	519.66	65	304	3.60	1038.44	1034	11	1.50E-03	****	4.58E+00	
0	566.13	30	199	1.09	1131.36	1128	7	6.96E-04	****	4.31E+00	
0	569.96	56	369	3.32	1139.03	1134	13	1.29E-03	****	4.29E+00	
0	699.48	92	397	3.93	1398.04	1392	15	2.13E-03	96.5	3.67E+00	
0	747.50	55	167	2.32	1494.06	1489	10	1.26E-03	94.1	3.48E+00	
0	886.82	6	183	1.16	1772.70	1768	12	1.33E-04	****	3.01E+00	
1	973.64	57	90	2.13	1946.36	1922	29	1.31E-03	71.2	2.78E+00	
0	1042.08	103	219	8.10	2083.25	2073	23	2.39E-03	77.1	2.62E+00	
6	1137.69	44	221	3.93	2274.51	2263	25	1.02E-03	****	2.43E+00	
6	1142.41	26	67	1.66	2283.96	2263	25	5.94E-04	****	2.42E+00	
3	1177.92	40	50	2.63	2354.99	2351	20	9.34E-04	68.1	2.36E+00	
3	1180.43	78	98	2.47	2360.00	2351	20	1.81E-03	59.8	2.35E+00	
0	1219.67	20	105	3.07	2438.51	2429	12	4.59E-04	****	2.29E+00	
0	1495.87	39	88	2.42	2991.10	2982	14	9.14E-04	****	1.96E+00	
0	1535.46	44	79	0.65	3070.32	3061	21	1.01E-03	****	1.93E+00	
0	1551.01	27	80	0.69	3101.44	3092	16	6.25E-04	****	1.92E+00	
0	1629.18	43	56	0.82	3257.85	3253	12	1.00E-03	74.5	1.87E+00	
3	1756.68	46	22	2.86	3513.00	3498	68	1.07E-03	68.5	1.80E+00	
3	1774.22	43	62	3.82	3548.10	3498	68	9.92E-04	90.9	1.80E+00	
0	1790.51	21	97	7.26	3580.70	3566	24	4.87E-04	****	1.79E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701053            *
* Acquisition date : 16-DEC-2007 16:48:09 Detector SN#    :                 *
* Detector ID      : GAM22                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 12:00:05.21     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701053           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 6.9030E+01 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 22-FEB-2007 17:43:25 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.631E-01	2.884E-01	1.085E-01	2.884E-01
CS-137	1.735E-02	2.177E-02	1.154E-02	2.177E-02
EU-155	4.895E-02	4.046E-02	3.317E-02	4.046E-02
TL-208	1.606E-01	3.082E-02	1.172E-02	3.082E-02
BI-212	5.302E-01	1.925E-01	8.456E-02	1.925E-01
PB-212	6.518E-01	6.139E-02	1.788E-02	6.139E-02
BI-214	2.298E-01	6.847E-02	2.299E-02	6.847E-02
PB-214	3.355E-01	5.390E-02	2.170E-02	5.390E-02
RA-223	9.811E-02	1.424E-01	5.561E-02	1.424E-01
AC-228	6.570E-01	1.351E-01	4.171E-02	1.351E-01
PA-234M	3.361E+00	3.057E+00	1.226E+00	3.057E+00
TH-234	6.100E-01	3.743E-01	1.421E-01	3.743E-01
U-235	9.689E-02	1.161E-01	5.994E-02	1.161E-01
NP-237	3.731E-01	1.067E-01	6.633E-02	1.067E-01
AM-243	1.313E-01	2.997E-02	1.367E-02	2.997E-02
CM-243	4.400E-02	3.637E-02	2.900E-02	3.637E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.273E-02	1.590E-02	1.168E-02	1.590E-02	NOT IDENT.
RH-101	-1.444E-02	2.084E-02	1.153E-02	2.084E-02	NOT IDENT.
SB-125	-1.966E-02	3.628E-02	2.841E-02	3.628E-02	NOT IDENT.
PO-209	-7.051E-01	2.768E+00	2.219E+00	2.768E+00	NOT IDENT.
BI-211	7.193E-02	3.927E-01	3.286E-01	3.927E-01	NOT IDENT.
PA-233	6.412E-03	2.579E-02	2.113E-02	2.579E-02	NOT IDENT.
NP-236	-5.072E-03	2.922E-02	1.843E-02	2.922E-02	NOT IDENT.
NP-239	-4.678E-02	9.189E-02	7.092E-02	9.189E-02	NOT IDENT.
AM-241	-6.519E-03	6.485E-02	3.837E-02	6.485E-02	NOT IDENT.
AM-246	-4.213E-02	5.022E-02	3.909E-02	5.022E-02	NOT IDENT.
CF-249	1.149E-02	1.556E-02	1.279E-02	1.556E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	848.2383
63.29	1003.9537
74.66	1063.1766
74.81	1063.5851
74.81	1063.5851
77.11	1069.8290
77.11	1069.8290
86.48	1152.4504
87.30	1154.6406
87.30	1154.6406
92.58	1109.3707
98.44	947.8624
103.76	912.9946
105.31	972.5630
129.07	895.8661
143.76	875.1564
198.00	863.5424
209.25	774.5727
228.18	832.1466
238.63	776.2472
242.00	779.1303
269.46	657.4019
270.25	657.9280
277.36	656.3440
295.22	623.1948
300.09	634.0191
312.17	620.0547
338.32	609.5497
351.93	552.9933
387.59	479.3893
409.46	450.5499
427.87	450.1325
463.00	369.6628
510.77	409.6213
583.19	416.6539
609.31	446.7799
661.66	334.5654
727.33	299.3908
763.13	309.2171
768.36	305.6615
785.37	242.0316
794.95	234.5239
806.17	268.4093
831.80	273.7551
860.56	225.7148
896.60	239.2512
911.20	236.9336
934.06	183.3643
964.77	218.9571
968.97	219.2862
1001.03	183.8171
1078.86	212.2847
1120.29	179.7880
1155.19	173.3501
1173.23	136.8079
1238.11	181.8681
1280.96	157.4016
1332.51	141.2771
1377.67	140.0587
1401.50	138.9690
1407.98	127.3544
1460.80	124.5280
1509.23	94.1835
1588.20	117.6530
1620.50	120.9943
1729.60	92.8081
1764.49	82.0574

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701053

Total Uranium Activity	4.4830E-02	ug/g
Total Uranium Counting Unc.	5.3716E-02	ug/g
Total Uranium Tpu	5.3716E-08	ug/g
Total Uranium Mda	2.7736E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:37:47.41

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701054.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:36:57
Sample ID        : G198701054           Sample quantity  : 1.11520E+02 GRAM
Detector name    : GAM04                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:28.33  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.42*	46	378	2.12	127.78	123	10	3.23E-03	84.1	
2	3	74.62	178	355	1.41	150.15	144	19	1.23E-02	20.0	1.15E+00
3	3	77.06	364	369	1.42	155.03	144	19	2.53E-02	11.2	
4	2	84.56*	36	347	1.31	170.03	166	29	2.53E-03	93.8	2.61E+00
5	2	87.28	179	291	1.19	175.46	166	29	1.25E-02	17.3	
6	2	89.76	124	320	1.32	180.41	166	29	8.61E-03	27.5	
7	2	92.56*	120	265	1.24	186.02	166	29	8.36E-03	29.6	
8	0	128.85	65	319	1.74	258.56	255	9	4.51E-03	51.0	
9	0	186.16*	138	327	1.79	373.11	368	11	9.55E-03	29.2	
10	0	197.13*	20	205	1.35	395.04	392	7	1.37E-03	138.4	
11	0	208.36	81	363	3.05	417.49	414	11	5.59E-03	46.9	
12	4	238.61*	862	227	1.40	477.96	472	17	5.99E-02	4.8	1.03E+00
13	4	241.41	239	250	1.84	483.56	472	17	1.66E-02	18.3	
14	0	269.81	124	195	2.25	540.33	535	10	8.64E-03	22.9	
15	2	295.01*	249	141	1.67	590.70	585	21	1.73E-02	11.9	1.05E+00
16	2	300.06	60	170	1.68	600.80	585	21	4.14E-03	41.6	
17	0	328.05*	38	135	0.98	656.76	653	8	2.64E-03	59.6	
18	0	338.11*	202	133	1.88	676.87	672	9	1.40E-02	13.9	
19	0	351.83*	478	154	1.67	704.29	697	15	3.32E-02	7.7	
20	0	410.29	46	135	0.89	821.15	816	12	3.22E-03	52.3	
21	1	462.89	63	66	1.69	926.31	919	27	4.37E-03	28.6	1.30E+00
22	1	465.86	43	68	1.70	932.25	919	27	2.96E-03	42.0	
23	0	510.77*	92	144	1.75	1022.02	1013	18	6.41E-03	40.0	
24	0	543.43	11	75	1.67	1087.32	1079	10	7.64E-04	150.3	
25	0	562.62	23	68	1.07	1125.69	1121	9	1.56E-03	69.1	
26	0	583.28*	297	65	1.59	1166.99	1158	16	2.07E-02	8.8	
27	0	609.32*	269	100	1.61	1219.06	1211	16	1.87E-02	11.1	
28	0	661.76	94	85	1.42	1323.90	1318	14	6.50E-03	22.9	
29	0	710.49	18	41	2.81	1421.31	1416	9	1.22E-03	69.8	
30	0	727.52	89	68	1.96	1455.36	1448	16	6.21E-03	23.2	
31	0	772.08	33	99	6.23	1544.45	1533	18	2.31E-03	73.7	
32	0	795.09	26	40	1.11	1590.46	1586	10	1.81E-03	49.6	
33	0	860.83	61	41	2.46	1721.92	1714	15	4.26E-03	26.1	
34	0	897.78	18	32	1.36	1795.79	1789	12	1.26E-03	67.2	
35	0	904.98	17	38	1.85	1810.18	1802	13	1.19E-03	78.8	
36	0	911.45*	193	57	1.77	1823.12	1817	16	1.34E-02	11.8	
37	3	964.58	36	39	2.52	1929.34	1923	26	2.53E-03	39.6	1.73E+00
38	3	969.17	113	45	2.52	1938.52	1923	26	7.85E-03	16.7	

Sample ID : G198701054 Acquisition date : 17-DEC-2007 12:36:57

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	983.92	8	25	1.48	1968.01	1961	9	5.71E-04	117.7	
40	0	1001.03	29	30	2.37	2002.22	1996	12	2.01E-03	42.1	
41	0	1105.03	10	19	0.76	2210.19	2205	8	6.85E-04	84.2	
42	0	1121.71*	79	54	0.81	2243.53	2234	21	5.49E-03	27.7	
43	0	1237.78	61	43	5.72	2475.63	2465	24	4.23E-03	30.9	
44	0	1318.94	23	33	6.05	2637.93	2625	22	1.60E-03	67.0	
45	0	1460.69*	231	9	2.31	2921.39	2912	20	1.61E-02	7.8	
46	0	1491.66	20	4	0.78	2983.32	2975	15	1.40E-03	30.5	
47	0	1497.90	23	16	3.51	2995.80	2989	13	1.57E-03	42.3	
48	0	1533.47	11	5	1.40	3066.95	3061	10	7.64E-04	48.5	
49	0	1590.02	38	7	5.33	3180.04	3172	17	2.61E-03	23.9	
50	0	1662.22	7	14	0.82	3324.44	3316	11	4.68E-04	120.9	
51	0	1720.22*	12	3	0.61	3440.43	3434	12	8.51E-04	42.2	
52	0	1729.62	22	10	0.93	3459.22	3452	13	1.55E-03	35.8	
53	0	1764.76*	52	18	2.24	3529.51	3522	15	3.58E-03	24.8	
54	0	1779.06	14	6	2.56	3558.11	3551	12	9.72E-04	44.0	
55	0	1791.74	9	7	1.79	3583.47	3575	13	5.90E-04	70.7	
56	0	1807.40*	0	6	0.58	3614.80	3604	12	3.17E-05	*****	
57	0	1820.86	20	4	4.41	3641.72	3634	16	1.42E-03	30.9	
58	0	1917.72	8	9	3.62	3835.45	3824	14	5.31E-04	95.9	
59	0	1943.81	16	0	1.49	3887.63	3881	12	1.11E-03	25.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701054       *
* Acquisition date : 17-DEC-2007 12:36:57 Detector SN#    :                 *
* Detector ID      : GAM04                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:28.33     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701054           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1152E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  6-MAR-2007 17:58:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.447E+00	5.665E-01	2.863E-01	0.000E+00
RH-101	9.009E-03	2.445E-02	3.454E-02	0.000E+00
CS-137	8.576E-02	3.894E-02	3.384E-02	0.000E+00
TL-208	2.456E-01	4.515E-02	3.050E-02	0.000E+00
PO-209	3.951E+00	5.217E+00	5.681E+00	0.000E+00
BI-212	6.384E-01	2.935E-01	2.713E-01	0.000E+00
PB-212	7.184E-01	9.871E-02	5.774E-02	0.000E+00
BI-214	4.218E-01	9.614E-02	6.988E-02	0.000E+00
PB-214	6.035E-01	1.006E-01	6.666E-02	0.000E+00
RA-223	3.568E-01	1.638E-01	1.778E-01	0.000E+00
AC-228	7.742E-01	1.943E-01	1.391E-01	0.000E+00
PA-234M	3.906E+00	3.241E+00	3.718E+00	0.000E+00
TH-234	7.155E-01	4.205E-01	4.628E-01	0.000E+00
NP-237	5.023E-01	1.765E-01	2.201E-01	0.000E+00
AM-243	1.229E-01	4.960E-02	5.704E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	2.552E-03	2.287E-02	3.868E-02	0.000E+00	NOT IDENT.
SB-125	3.002E-02	5.509E-02	9.824E-02	0.000E+00	NOT IDENT.
EU-155	1.935E-03	6.670E-02	1.105E-01	0.000E+00	NOT IDENT.
BI-211	1.744E-01	6.340E-01	1.067E+00	0.000E+00	NOT IDENT.
PA-233	1.708E-02	3.596E-02	6.179E-02	0.000E+00	NOT IDENT.
U-235	-1.841E-02	1.330E-01	2.049E-01	0.000E+00	NOT IDENT.
NP-236	8.686E-03	4.118E-02	6.161E-02	0.000E+00	NOT IDENT.
NP-239	4.914E-02	1.260E-01	2.185E-01	0.000E+00	NOT IDENT.
AM-241	-9.481E-02	1.333E-01	1.923E-01	0.000E+00	NOT IDENT.
CM-243	2.734E-02	5.976E-02	1.009E-01	0.000E+00	NOT IDENT.
AM-246	2.166E-02	7.208E-02	1.253E-01	0.000E+00	NOT IDENT.
CF-249	-1.387E-02	2.423E-02	3.826E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:37:48.32

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701054.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 12:36:57
Sample ID        : G198701054           Sample quantity  : 1.11520E+02 GRAM
Detector name    : GAM04                Detector geometry: CAN
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:28.33  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	231	10.66*	1.060E+00	3.447E+00	3.447E+00	16.77
RH-101	198.00	20	73.00*	5.274E+00	8.601E-03	9.009E-03	276.95
CS-137	661.66	94	85.10*	2.171E+00	8.532E-02	8.576E-02	46.34
TL-208	277.36	------	6.31	4.202E+00	------	Line Not Found	------
	510.77	92	22.60	2.682E+00	2.565E-01	2.565E-01	80.26
	583.19	297	84.50*	2.412E+00	2.456E-01	2.456E-01	18.76
	763.13	------	1.81	1.915E+00	------	Line Not Found	------
	860.56	61	12.42	1.715E+00	4.851E-01	4.851E-01	53.03
PO-209	896.60	18	0.47*	1.649E+00	3.946E+00	3.951E+00	134.73
BI-212	727.33	89	11.80*	1.999E+00	6.384E-01	6.384E-01	46.92
	785.37	------	1.10	1.866E+00	------	Line Not Found	------
	1620.50	------	1.49	9.849E-01	------	Line Not Found	------
PB-212	74.81	178	10.40	3.567E+00	8.062E-01	8.062E-01	41.17
	77.11	364	17.50	3.850E+00	9.098E-01	9.098E-01	24.34
	87.30	179	7.81	4.845E+00	7.976E-01	7.976E-01	35.86
	238.63	862	43.30*	4.664E+00	7.184E-01	7.184E-01	14.02
	300.09	60	3.28	3.974E+00	7.704E-01	7.704E-01	83.62
BI-214	609.31	269	46.10*	2.327E+00	4.218E-01	4.218E-01	23.26
	768.36	------	4.94	1.904E+00	------	Line Not Found	------
	806.17	------	1.22	1.822E+00	------	Line Not Found	------
	934.06	------	3.03	1.589E+00	------	Line Not Found	------
	1120.29	79	15.10	1.336E+00	6.592E-01	6.593E-01	55.96
	1155.19	------	1.63	1.299E+00	------	Line Not Found	------
	1238.11	61	5.79	1.219E+00	1.453E+00	1.454E+00	62.23
	1280.96	------	1.43	1.183E+00	------	Line Not Found	------
	1377.67	------	4.00	1.111E+00	------	Line Not Found	------
	1401.50	------	1.27	1.095E+00	------	Line Not Found	------
	1407.98	------	2.15	1.091E+00	------	Line Not Found	------
	1509.23	------	2.11	1.034E+00	------	Line Not Found	------
	1729.60	22	2.92	9.490E-01	1.355E+00	1.355E+00	71.79
	1764.49	52	15.40	9.397E-01	5.991E-01	5.992E-01	50.01
PB-214	74.81	178	6.44	3.567E+00	1.302E+00	1.302E+00	41.17

Sample ID : G198701054 Acquisition date : 17-DEC-2007 12:36:57

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	77.11	364	10.80	3.850E+00	1.474E+00	1.474E+00	24.34
	87.30	179	4.84	4.845E+00	1.287E+00	1.287E+00	35.86
	242.00	239	7.43	4.627E+00	1.168E+00	1.169E+00	38.01
	295.22	249	19.30	4.022E+00	5.404E-01	5.405E-01	25.46
	351.93	478	37.60*	3.544E+00	6.035E-01	6.035E-01	17.02
RA-223	269.46	124	13.70*	4.284E+00	3.568E-01	3.568E-01	46.85
AC-228	129.07	65	2.42	6.175E+00	7.316E-01	7.316E-01	102.48
	209.25	81	3.89	5.097E+00	6.837E-01	6.837E-01	94.37
	270.25	124	3.46	4.284E+00	1.413E+00	1.413E+00	46.85
	338.32	202	11.27	3.647E+00	8.269E-01	8.269E-01	28.83
	409.46	46	1.92	3.167E+00	1.282E+00	1.282E+00	104.70
	463.00	63	4.40	2.893E+00	8.314E-01	8.314E-01	57.47
	794.95	26	4.25	1.845E+00	5.579E-01	5.579E-01	99.47
	911.20	193	25.80*	1.626E+00	7.742E-01	7.742E-01	25.61
	964.77	36	4.99	1.541E+00	7.972E-01	7.972E-01	79.71
	968.97	113	15.80	1.534E+00	7.846E-01	7.846E-01	34.77
	1588.20	38	3.22	9.971E-01	1.973E+00	1.973E+00	48.25
PA-234M	1001.03	29	0.84*	1.488E+00	3.906E+00	3.906E+00	84.67
TH-234	63.29	46	4.80	2.139E+00	7.614E-01	7.614E-01	168.61
	92.58	120	5.41*	5.235E+00	7.155E-01	7.155E-01	59.97
NP-237	86.48	179	12.40*	4.845E+00	5.023E-01	5.023E-01	35.86
AM-243	74.66	178	68.20*	3.567E+00	1.229E-01	1.229E-01	41.17

Flag: "*" = Keyline

Sample ID : G198701054 Acquisition date : 17-DEC-2007 12:36:57

Total number of lines in spectrum 59
Number of unidentified lines 24
Number of lines tentatively identified by NID 35 59.32%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.447E+00	3.447E+00	0.578E+00	16.77	
RH-101	1.04E+08S	1.05	8.601E-03	9.009E-03	24.95E-03	276.95	
CS-137	9.47E+08S	1.01	8.532E-02	8.576E-02	3.974E-02	46.34	
TL-208	4.43E+17S	1.00	2.456E-01	2.456E-01	0.461E-01	18.76	
PO-209	3.22E+09S	1.00	3.946E+00	3.951E+00	5.324E+00	134.73	
BI-212	4.43E+17S	1.00	6.384E-01	6.384E-01	2.995E-01	46.92	
PB-212	4.43E+17S	1.00	7.184E-01	7.184E-01	1.007E-01	14.02	
BI-214	5.05E+10S	1.00	4.218E-01	4.218E-01	0.981E-01	23.26	
PB-214	5.05E+10S	1.00	6.035E-01	6.035E-01	1.027E-01	17.02	
RA-223	1.04E+12S	1.00	3.568E-01	3.568E-01	1.672E-01	46.85	
AC-228	4.43E+17S	1.00	7.742E-01	7.742E-01	1.983E-01	25.61	
PA-234M	1.41E+17S	1.00	3.906E+00	3.906E+00	3.307E+00	84.67	
TH-234	1.41E+17S	1.00	7.155E-01	7.155E-01	4.290E-01	59.97	
NP-237	6.75E+13S	1.00	5.023E-01	5.023E-01	1.801E-01	35.86	
AM-243	2.33E+11S	1.00	1.229E-01	1.229E-01	0.506E-01	41.17	
			---	---			
		Total Activity :	1.649E+01	1.650E+01			

Grand Total Activity : 1.649E+01 1.650E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701054 Acquisition date : 17-DEC-2007 12:36:57

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	84.56	36	347	1.31	170.03	166	29	2.53E-03	****	4.61E+00	
2	89.76	124	320	1.32	180.41	166	29	8.61E-03	55.0	5.04E+00	
0	186.16	138	327	1.79	373.11	368	11	9.55E-03	58.4	5.45E+00	
0	328.05	38	135	0.98	656.76	653	8	2.64E-03	****	3.73E+00	
1	465.86	43	68	1.70	932.25	919	27	2.96E-03	84.1	2.88E+00	
0	543.43	11	75	1.67	1087.32	1079	10	7.64E-04	****	2.55E+00	
0	562.62	23	68	1.07	1125.69	1121	9	1.56E-03	****	2.48E+00	
0	710.49	18	41	2.81	1421.31	1416	9	1.22E-03	****	2.04E+00	
0	772.08	33	99	6.23	1544.45	1533	18	2.31E-03	****	1.90E+00	
0	904.98	17	38	1.85	1810.18	1802	13	1.19E-03	****	1.64E+00	
0	983.92	8	25	1.48	1968.01	1961	9	5.71E-04	****	1.51E+00	
0	1105.03	10	19	0.76	2210.19	2205	8	6.85E-04	****	1.35E+00	
0	1318.94	23	33	6.05	2637.93	2625	22	1.60E-03	****	1.15E+00	
0	1491.66	20	4	0.78	2983.32	2975	15	1.40E-03	61.1	1.04E+00	
0	1497.90	23	16	3.51	2995.80	2989	13	1.57E-03	84.6	1.04E+00	
0	1533.47	11	5	1.40	3066.95	3061	10	7.64E-04	97.1	1.02E+00	
0	1662.22	7	14	0.82	3324.44	3316	11	4.68E-04	****	9.70E-01	
0	1720.22	12	3	0.61	3440.43	3434	12	8.51E-04	84.5	9.52E-01	
0	1779.06	14	6	2.56	3558.11	3551	12	9.72E-04	88.1	9.36E-01	
0	1791.74	9	7	1.79	3583.47	3575	13	5.90E-04	****	9.33E-01	
0	1820.86	20	4	4.41	3641.72	3634	16	1.42E-03	61.8	9.27E-01	
0	1917.72	8	9	3.62	3835.45	3824	14	5.31E-04	****	9.11E-01	
0	1943.81	16	0	1.49	3887.63	3881	12	1.11E-03	50.0	9.08E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701054            *
* Acquisition date : 17-DEC-2007 12:36:57 Detector SN#    :                 *
* Detector ID      : GAM04                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 04:00:28.33     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701054           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1152E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  6-MAR-2007 17:58:01 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.447E+00	5.665E-01	1.432E-01	5.665E-01
RH-101	9.009E-03	2.445E-02	1.728E-02	2.445E-02
CS-137	8.576E-02	3.894E-02	1.693E-02	3.894E-02
TL-208	2.456E-01	4.515E-02	1.526E-02	4.515E-02
PO-209	3.951E+00	5.217E+00	2.842E+00	5.217E+00
BI-212	6.384E-01	2.935E-01	1.357E-01	2.935E-01
PB-212	7.184E-01	9.871E-02	2.889E-02	9.871E-02
BI-214	4.218E-01	9.614E-02	3.496E-02	9.614E-02
PB-214	6.035E-01	1.006E-01	3.335E-02	1.006E-01
RA-223	3.568E-01	1.638E-01	8.896E-02	1.638E-01
AC-228	7.742E-01	1.943E-01	6.960E-02	1.943E-01
PA-234M	3.906E+00	3.241E+00	1.860E+00	3.241E+00
TH-234	7.155E-01	4.205E-01	2.316E-01	4.205E-01
NP-237	5.023E-01	1.765E-01	1.101E-01	1.765E-01
AM-243	1.229E-01	4.960E-02	2.854E-02	4.960E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.552E-03	2.287E-02	1.935E-02	2.287E-02	NOT IDENT.
SB-125	3.002E-02	5.509E-02	4.915E-02	5.509E-02	NOT IDENT.
EU-155	1.935E-03	6.670E-02	5.528E-02	6.670E-02	NOT IDENT.
BI-211	1.744E-01	6.340E-01	5.341E-01	6.340E-01	NOT IDENT.
PA-233	1.708E-02	3.596E-02	3.091E-02	3.596E-02	NOT IDENT.
U-235	-1.841E-02	1.330E-01	1.025E-01	1.330E-01	NOT IDENT.
NP-236	8.686E-03	4.118E-02	3.082E-02	4.118E-02	NOT IDENT.
NP-239	4.914E-02	1.260E-01	1.093E-01	1.260E-01	NOT IDENT.
AM-241	-9.481E-02	1.333E-01	9.620E-02	1.333E-01	NOT IDENT.
CM-243	2.734E-02	5.976E-02	5.048E-02	5.976E-02	NOT IDENT.
AM-246	2.166E-02	7.208E-02	6.269E-02	7.208E-02	NOT IDENT.
CF-249	-1.387E-02	2.423E-02	1.914E-02	2.423E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	234.4605
63.29	240.6265
74.66	303.8779
74.81	303.9710
74.81	303.9710
77.11	305.3661
77.11	305.3661
86.48	268.4577
87.30	268.8597
87.30	268.8597
92.58	271.4012
98.44	258.0468
103.76	262.0003
105.31	278.3705
129.07	269.8365
143.76	266.9289
198.00	256.1963
209.25	246.3100
228.18	189.3747
238.63	217.8268
242.00	191.4036
269.46	175.1567
270.25	153.9969
277.36	172.2286
295.22	146.7907
300.09	147.3454
312.17	121.4782
338.32	165.6483
351.93	127.1431
387.59	130.1788
409.46	116.3129
427.87	101.3264
463.00	77.5462
510.77	83.3519
583.19	62.8188
609.31	91.3936
661.66	63.0202
727.33	66.8219
763.13	59.9897
768.36	65.4124
785.37	46.9702
794.95	55.7070
806.17	50.5571
831.80	57.5379
860.56	44.9599
896.60	31.7167
911.20	55.7739
934.06	46.8252
964.77	34.0459
968.97	34.0913
1001.03	35.3876
1078.86	33.2764
1120.29	47.5332
1155.19	45.9925
1173.23	36.1699
1238.11	25.5503
1280.96	29.9617
1332.51	20.9269
1377.67	25.3848
1401.50	24.4628
1407.98	21.3037
1460.80	17.2493
1509.23	23.3503
1588.20	24.9353
1620.50	22.9520
1729.60	12.6315
1764.49	15.7450

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701054

Total Uranium Activity	-8.5193E-03	ug/g
Total Uranium Counting Unc.	6.1529E-02	ug/g
Total Uranium Tpu	6.1529E-08	ug/g
Total Uranium Mda	4.7429E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:29:42.76

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701055.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 14:29:12
Sample ID        : G198701055           Sample quantity  : 1.10470E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:01.71  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.29*	17	191	0.86	107.35	104	7	1.61E-03	144.6	
2	2	63.06*	98	257	1.46	126.88	122	12	9.11E-03	34.5	3.43E+00
3	2	64.85*	23	177	1.04	130.46	122	12	2.09E-03	112.5	
4	2	72.14*	39	256	1.44	145.04	142	19	3.62E-03	73.1	1.79E+00
5	2	74.58*	346	329	1.46	149.90	142	19	3.20E-02	11.7	
6	2	76.89*	345	219	1.00	154.53	142	19	3.19E-02	9.4	
7	2	86.83	178	270	1.53	174.39	163	29	1.65E-02	18.2	4.21E+00
8	2	89.87	121	263	1.53	180.47	163	29	1.12E-02	26.5	
9	2	92.60*	88	199	1.18	185.92	163	29	8.13E-03	36.8	
10	0	115.85	55	173	1.03	232.39	229	8	5.14E-03	43.3	
11	0	185.87*	64	273	1.39	372.34	365	11	5.96E-03	55.5	
12	0	208.80	123	215	2.05	418.18	411	14	1.14E-02	27.0	
13	2	238.70*	464	124	1.22	477.93	472	18	4.29E-02	6.5	1.05E+00
14	2	241.73	108	154	1.83	483.98	472	18	9.98E-03	28.2	
15	0	295.28*	140	156	1.17	591.02	587	10	1.29E-02	19.7	
16	0	301.72	28	160	4.31	603.87	598	13	2.57E-03	97.1	
17	0	338.52*	93	140	1.11	677.43	671	11	8.57E-03	28.5	
18	0	351.95*	261	140	1.56	704.27	695	14	2.42E-02	11.9	
19	0	365.07	36	98	0.80	730.48	724	12	3.31E-03	58.1	
20	0	424.40	33	113	3.45	849.03	842	15	3.02E-03	73.1	
21	0	447.93	17	49	1.34	896.06	893	8	1.53E-03	75.9	
22	0	465.12	48	99	4.37	930.40	920	17	4.47E-03	49.9	
23	0	511.10*	43	88	1.98	1022.28	1012	21	4.01E-03	74.6	
24	0	583.37*	135	62	1.27	1166.66	1160	13	1.25E-02	16.0	
25	0	609.36*	183	62	1.75	1218.60	1211	14	1.70E-02	12.4	
26	0	663.06	48	84	8.74	1325.88	1313	24	4.44E-03	52.5	
27	0	726.60	36	68	4.85	1452.83	1444	16	3.31E-03	54.2	
28	0	756.88*	6	35	1.82	1513.31	1504	12	5.53E-04	232.5	
29	0	768.52	27	34	0.95	1536.57	1532	9	2.46E-03	44.9	
30	0	804.61	33	33	3.22	1608.65	1603	14	3.02E-03	42.1	
31	0	825.28	12	17	1.08	1649.95	1645	9	1.11E-03	69.6	
32	0	836.93	17	50	3.59	1673.22	1664	13	1.61E-03	86.5	
33	0	850.08	15	45	4.42	1699.50	1691	14	1.39E-03	98.6	
34	0	877.54	78	66	8.89	1754.34	1734	38	7.21E-03	35.8	
35	0	911.59*	120	28	1.57	1822.34	1815	16	1.11E-02	14.0	
36	0	965.63	12	30	0.74	1930.28	1925	8	1.14E-03	82.2	
37	0	969.67*	22	39	1.97	1938.36	1933	9	2.05E-03	52.2	
38	0	1003.61	23	28	2.29	2006.14	1994	16	2.10E-03	56.3	

Sample ID : G198701055 Acquisition date : 17-DEC-2007 14:29:12

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1045.06	9	16	1.24	2088.93	2084	9	8.30E-04	86.8	
40	0	1111.37	22	43	9.10	2221.35	2208	25	2.00E-03	85.1	
41	0	1122.76*	23	45	1.06	2244.11	2234	16	2.13E-03	73.5	
42	0	1239.23	27	16	2.20	2476.70	2470	11	2.46E-03	35.4	
43	0	1275.42	24	0	4.34	2548.96	2543	12	2.22E-03	20.4	
44	0	1401.52	5	26	3.34	2800.74	2785	20	4.64E-04	249.0	
45	0	1452.71	16	0	3.17	2902.94	2898	11	1.48E-03	25.0	
46	0	1461.45*	207	27	1.95	2920.40	2913	18	1.91E-02	9.4	
47	0	1546.39	7	10	1.12	3089.96	3078	14	6.10E-04	111.3	
48	0	1590.39	18	8	2.09	3177.80	3168	15	1.70E-03	40.1	
49	0	1765.85*	44	7	1.51	3528.03	3523	13	4.10E-03	20.8	
50	0	1832.36	7	3	0.86	3660.77	3653	12	6.57E-04	61.4	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701055       *
* Acquisition date : 17-DEC-2007 14:29:12 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:01.71     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701055           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1047E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.499E+00	8.962E-01	4.279E-01	0.000E+00
CS-137	6.815E-02	7.039E-02	4.955E-02	0.000E+00
TL-208	1.720E-01	5.530E-02	4.595E-02	0.000E+00
BI-212	3.943E-01	4.203E-01	3.522E-01	0.000E+00
PB-212	5.434E-01	8.217E-02	7.058E-02	0.000E+00
PB-214	4.809E-01	1.151E-01	9.208E-02	0.000E+00
AC-228	7.347E-01	2.129E-01	1.690E-01	0.000E+00
TH-234	5.171E-01	3.753E-01	4.313E-01	0.000E+00
NP-237	4.522E-01	1.656E-01	1.849E-01	0.000E+00
AM-243	1.565E-01	3.809E-02	3.592E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	-5.003E-03		3.267E-02	5.411E-02	0.000E+00	NOT IDENT.
RH-101	-4.334E-03		2.936E-02	4.583E-02	0.000E+00	NOT IDENT.
SB-125	-4.792E-04		9.351E-02	1.351E-01	0.000E+00	NOT IDENT.
EU-155	2.781E-02		6.756E-02	1.177E-01	0.000E+00	NOT IDENT.
PO-209	-3.267E-01		6.173E+00	1.017E+01	0.000E+00	NOT IDENT.
BI-211	3.980E-01		1.132E+00	1.434E+00	0.000E+00	NOT IDENT.
BI-214	0.000E+00		1.125E-01	1.778E-01	0.000E+00	FAIL ABUN
RA-223	4.452E-02		1.434E-01	2.508E-01	0.000E+00	NOT IDENT.
PA-233	-1.072E-02		4.670E-02	7.853E-02	0.000E+00	NOT IDENT.
PA-234M	4.050E+00		3.474E+00	6.438E+00	0.000E+00	NOT IDENT.
U-235	-1.056E-01		1.527E-01	2.327E-01	0.000E+00	NOT IDENT.
NP-236	1.440E-02		3.777E-02	6.139E-02	0.000E+00	NOT IDENT.
NP-239	-2.645E-01		1.630E-01	2.375E-01	0.000E+00	NOT IDENT.
AM-241	1.648E-02		3.704E-02	5.891E-02	0.000E+00	NOT IDENT.
CM-243	6.374E-02		5.910E-02	1.057E-01	0.000E+00	NOT IDENT.
AM-246	-5.701E-02		9.813E-02	1.543E-01	0.000E+00	NOT IDENT.
CF-249	6.827E-03		3.087E-02	5.278E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:29:43.92

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701055.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 14:29:12
Sample ID        : G198701055           Sample quantity  : 1.10470E+02 GRAM
Detector name    : GAM05                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:01.71  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	207	10.66*	9.765E-01	4.499E+00	4.499E+00	20.32
CS-137	661.66	48	85.10*	1.884E+00	6.780E-02	6.815E-02	105.40
TL-208	277.36	------	6.31	3.981E+00	------	Line Not Found	------
	510.77	43	22.60	2.367E+00	1.836E-01	1.836E-01	149.35
	583.19	135	84.50*	2.107E+00	1.720E-01	1.720E-01	32.80
	763.13	------	1.81	1.670E+00	------	Line Not Found	------
	860.56	------	12.42	1.508E+00	------	Line Not Found	------
BI-212	727.33	36	11.80*	1.741E+00	3.943E-01	3.943E-01	108.76
	785.37	------	1.10	1.629E+00	------	Line Not Found	------
	1620.50	------	1.49	8.967E-01	------	Line Not Found	------
PB-212	74.81	346	10.40	7.333E+00	1.026E+00	1.026E+00	24.83
	77.11	345	17.50	7.312E+00	6.100E-01	6.100E-01	20.44
	87.30	178	7.81	7.194E+00	7.179E-01	7.179E-01	37.37
	238.63	464	43.30*	4.465E+00	5.434E-01	5.434E-01	15.43
	300.09	28	3.28	3.721E+00	5.150E-01	5.150E-01	194.39
PB-214	74.81	346	6.44	7.333E+00	1.657E+00	1.658E+00	24.83
	77.11	345	10.80	7.312E+00	9.884E-01	9.885E-01	20.44
	87.30	178	4.84	7.194E+00	1.159E+00	1.159E+00	37.37
	242.00	108	7.43	4.424E+00	7.430E-01	7.431E-01	56.93
	295.22	140	19.30	3.787E+00	4.327E-01	4.327E-01	39.88
	351.93	261	37.60*	3.274E+00	4.809E-01	4.809E-01	24.42
AC-228	129.07	------	2.42	6.409E+00	------	Line Not Found	------
	209.25	123	3.89	4.910E+00	1.457E+00	1.457E+00	54.76
	270.25	------	3.46	4.063E+00	------	Line Not Found	------
	338.32	93	11.27	3.383E+00	5.500E-01	5.500E-01	57.35
	409.46	------	1.92	2.874E+00	------	Line Not Found	------
	463.00	------	4.40	2.582E+00	------	Line Not Found	------
	794.95	------	4.25	1.613E+00	------	Line Not Found	------
	911.20	120	25.80*	1.437E+00	7.347E-01	7.347E-01	29.56
	964.77	12	4.99	1.370E+00	4.071E-01	4.071E-01	164.64
	968.97	22	15.80	1.365E+00	2.326E-01	2.326E-01	104.70
	1588.20	------	3.22	9.118E-01	------	Line Not Found	------

Sample ID : G198701055 Acquisition date : 17-DEC-2007 14:29:12

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
TH-234	63.29	98	4.80	7.386E+00	6.284E-01	6.284E-01	69.49
	92.58	88	5.41*	7.107E+00	5.171E-01	5.171E-01	74.06
NP-237	86.48	178	12.40*	7.194E+00	4.522E-01	4.522E-01	37.37
AM-243	74.66	346	68.20*	7.333E+00	1.565E-01	1.565E-01	24.83

Flag: "*" = Keyline

Sample ID : G198701055 Acquisition date : 17-DEC-2007 14:29:12

Total number of lines in spectrum 50
Number of unidentified lines 24
Number of lines tentatively identified by NID 26 52.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.499E+00	4.499E+00	0.914E+00	20.32	
CS-137	9.47E+08S	1.01	6.780E-02	6.815E-02	7.183E-02	105.40	
TL-208	4.43E+17S	1.00	1.720E-01	1.720E-01	0.564E-01	32.80	
BI-212	4.43E+17S	1.00	3.943E-01	3.943E-01	4.289E-01	108.76	
PB-212	4.43E+17S	1.00	5.434E-01	5.434E-01	0.838E-01	15.43	
PB-214	5.05E+10S	1.00	4.809E-01	4.809E-01	1.174E-01	24.42	
AC-228	4.43E+17S	1.00	7.347E-01	7.347E-01	2.172E-01	29.56	
TH-234	1.41E+17S	1.00	5.171E-01	5.171E-01	3.830E-01	74.06	
NP-237	6.75E+13S	1.00	4.522E-01	4.522E-01	1.690E-01	37.37	
AM-243	2.33E+11S	1.00	1.565E-01	1.565E-01	0.389E-01	24.83	
			---	---			
	Total Activity :		8.018E+00	8.019E+00			

Grand Total Activity : 8.018E+00 8.019E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701055 Acquisition date : 17-DEC-2007 14:29:12

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.29	17	191	0.86	107.35	104	7	1.61E-03	****	7.35E+00	
2	64.85	23	177	1.04	130.46	122	12	2.09E-03	****	7.38E+00	
2	72.14	39	256	1.44	145.04	142	19	3.62E-03	****	7.35E+00	
2	89.87	121	263	1.53	180.47	163	29	1.12E-02	52.9	7.15E+00	
0	115.85	55	173	1.03	232.39	229	8	5.14E-03	86.5	6.68E+00	
0	185.87	64	273	1.39	372.34	365	11	5.96E-03	****	5.30E+00	
0	365.07	36	98	0.80	730.48	724	12	3.31E-03	****	3.17E+00	
0	424.40	33	113	3.45	849.03	842	15	3.02E-03	****	2.79E+00	
0	447.93	17	49	1.34	896.06	893	8	1.53E-03	****	2.66E+00	
0	465.12	48	99	4.37	930.40	920	17	4.47E-03	99.9	2.57E+00	
0	609.36	183	62	1.75	1218.60	1211	14	1.70E-02	24.7	2.03E+00	T
0	756.88	6	35	1.82	1513.31	1504	12	5.53E-04	****	1.68E+00	
0	768.52	27	34	0.95	1536.57	1532	9	2.46E-03	89.9	1.66E+00	T
0	804.61	33	33	3.22	1608.65	1603	14	3.02E-03	84.2	1.60E+00	T
0	825.28	12	17	1.08	1649.95	1645	9	1.11E-03	****	1.56E+00	
0	836.93	17	50	3.59	1673.22	1664	13	1.61E-03	****	1.54E+00	
0	850.08	15	45	4.42	1699.50	1691	14	1.39E-03	****	1.52E+00	
0	877.54	78	66	8.89	1754.34	1734	38	7.21E-03	71.5	1.48E+00	
0	1003.61	23	28	2.29	2006.14	1994	16	2.10E-03	****	1.33E+00	
0	1045.06	9	16	1.24	2088.93	2084	9	8.30E-04	****	1.28E+00	
0	1111.37	22	43	9.10	2221.35	2208	25	2.00E-03	****	1.22E+00	
0	1122.76	23	45	1.06	2244.11	2234	16	2.13E-03	****	1.21E+00	
0	1239.23	27	16	2.20	2476.70	2470	11	2.46E-03	70.8	1.12E+00	T
0	1275.42	24	0	4.34	2548.96	2543	12	2.22E-03	40.8	1.09E+00	
0	1401.52	5	26	3.34	2800.74	2785	20	4.64E-04	****	1.01E+00	T
0	1452.71	16	0	3.17	2902.94	2898	11	1.48E-03	50.0	9.81E-01	
0	1546.39	7	10	1.12	3089.96	3078	14	6.10E-04	****	9.32E-01	
0	1590.39	18	8	2.09	3177.80	3168	15	1.70E-03	80.2	9.11E-01	
0	1765.85	44	7	1.51	3528.03	3523	13	4.10E-03	41.6	8.34E-01	T
0	1832.36	7	3	0.86	3660.77	3653	12	6.57E-04	****	8.08E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701055            *
* Acquisition date : 17-DEC-2007 14:29:12 Detector SN#    :                 *
* Detector ID      : GAM05                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:01.71     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701055           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.1047E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME : 31-MAY-2007 12:09:24 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.499E+00	8.962E-01	2.141E-01	8.962E-01
CS-137	6.815E-02	7.039E-02	2.479E-02	7.039E-02
TL-208	1.720E-01	5.530E-02	2.299E-02	5.530E-02
BI-212	3.943E-01	4.203E-01	1.762E-01	4.203E-01
PB-212	5.434E-01	8.217E-02	3.531E-02	8.217E-02
PB-214	4.809E-01	1.151E-01	4.607E-02	1.151E-01
AC-228	7.347E-01	2.129E-01	8.457E-02	2.129E-01
TH-234	5.171E-01	3.753E-01	2.158E-01	3.753E-01
NP-237	4.522E-01	1.656E-01	9.253E-02	1.656E-01
AM-243	1.565E-01	3.809E-02	1.797E-02	3.809E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	-5.003E-03	3.267E-02	2.707E-02	3.267E-02	NOT IDENT.
RH-101	-4.334E-03	2.936E-02	2.293E-02	2.936E-02	NOT IDENT.
SB-125	-4.792E-04	9.351E-02	6.760E-02	9.351E-02	NOT IDENT.
EU-155	2.781E-02	6.756E-02	5.891E-02	6.756E-02	NOT IDENT.
PO-209	-3.267E-01	6.173E+00	5.090E+00	6.173E+00	NOT IDENT.
BI-211	3.980E-01	1.132E+00	7.176E-01	1.132E+00	NOT IDENT.
BI-214	4.445E-01	1.125E-01	8.894E-02	1.125E-01	FAIL ABUN
RA-223	4.452E-02	1.434E-01	1.255E-01	1.434E-01	NOT IDENT.
PA-233	-1.072E-02	4.670E-02	3.929E-02	4.670E-02	NOT IDENT.
PA-234M	4.050E+00	3.474E+00	3.221E+00	3.474E+00	NOT IDENT.
U-235	-1.056E-01	1.527E-01	1.164E-01	1.527E-01	NOT IDENT.
NP-236	1.440E-02	3.777E-02	3.072E-02	3.777E-02	NOT IDENT.
NP-239	-2.645E-01	1.630E-01	1.188E-01	1.630E-01	NOT IDENT.
AM-241	1.648E-02	3.704E-02	2.947E-02	3.704E-02	NOT IDENT.
CM-243	6.374E-02	5.910E-02	5.286E-02	5.910E-02	NOT IDENT.
AM-246	-5.701E-02	9.813E-02	7.722E-02	9.813E-02	NOT IDENT.
CF-249	6.827E-03	3.087E-02	2.640E-02	3.087E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                           CHARLESTON ,SC 29417                            *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	192.4103
63.29	237.0015
74.66	281.2172
74.81	281.2960
74.81	281.2960
77.11	282.4951
77.11	282.4951
86.48	238.0755
87.30	238.4072
87.30	238.4072
92.58	240.5028
98.44	217.0719
103.76	200.0757
105.31	225.8536
129.07	244.5406
143.76	234.7568
198.00	189.1947
209.25	167.0641
228.18	181.1549
238.63	165.2060
242.00	165.6818
269.46	162.9568
270.25	162.1324
277.36	157.4411
295.22	140.0602
300.09	189.5190
312.17	113.7458
338.32	120.0257
351.93	114.5603
387.59	92.3785
409.46	98.6696
427.87	99.3701
463.00	92.2120
510.77	70.8674
583.19	60.1665
609.31	72.0951
661.66	56.4624
727.33	47.1270
763.13	66.8555
768.36	71.7671
785.37	48.1367
794.95	42.2623
806.17	29.4399
831.80	39.7451
860.56	48.3607
896.60	44.7663
911.20	35.5605
934.06	34.7624
964.77	45.5715
968.97	45.6290
1001.03	26.8712
1078.86	34.8501
1120.29	40.0078
1155.19	28.8417
1173.23	36.7051
1238.11	28.4741
1280.96	27.7813
1332.51	29.1264
1377.67	14.2075
1401.50	30.3539
1407.98	19.6689
1460.80	18.0896
1509.23	11.4884
1588.20	24.1497
1620.50	25.6423
1729.60	17.1859
1764.49	10.2510

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701055

Total Uranium Activity	-4.8871E-02	ug/g
Total Uranium Counting Unc.	7.0652E-02	ug/g
Total Uranium Tpu	7.0652E-08	ug/g
Total Uranium Mda	5.3871E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:30:25.17

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701056.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 14:29:40
Sample ID        : G198701056           Sample quantity  : 1.06330E+02 GRAM
Detector name    : GAM13                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:02.73  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.56*	77	365	1.04	92.57	88	9	7.16E-03	52.3	
2	0	53.20*	72	398	0.96	105.86	101	10	6.67E-03	57.0	
3	0	63.53*	8	482	0.91	126.54	122	9	7.50E-04	606.6	
4	3	74.98	188	356	1.07	149.46	145	20	1.74E-02	17.1	2.30E+00
5	3	77.15*	322	371	1.08	153.81	145	20	2.98E-02	12.1	
6	3	80.95*	65	330	1.10	161.41	145	20	6.03E-03	54.9	
7	0	84.08*	42	273	1.38	167.67	165	6	3.88E-03	71.7	
8	0	87.26	148	285	1.03	174.05	171	7	1.37E-02	20.8	
9	2	92.69*	50	311	1.03	184.92	181	13	4.62E-03	84.2	4.86E+00
10	0	112.92*	2	233	0.92	225.41	223	6	1.98E-04	*****	
11	0	128.80*	27	213	0.73	257.20	254	6	2.49E-03	95.8	
12	0	163.47*	4	279	0.90	326.59	323	8	4.12E-04	709.0	
13	0	185.84*	15	349	0.97	371.38	366	11	1.39E-03	288.7	
14	0	202.26	36	211	0.68	404.23	401	7	3.34E-03	68.6	
15	0	228.23	40	149	1.43	456.23	454	7	3.68E-03	53.2	
16	2	238.68*	338	211	1.09	477.14	473	21	3.13E-02	9.8	1.60E+00
17	2	241.82	81	219	1.38	483.42	473	21	7.49E-03	34.6	
18	0	252.66	21	228	1.28	505.11	498	9	1.96E-03	131.0	
19	0	270.39	49	169	1.16	540.62	537	8	4.49E-03	48.5	
20	1	292.69	27	45	1.10	585.24	584	19	2.50E-03	38.5	1.77E+00
21	1	295.18*	113	139	1.31	590.23	584	19	1.04E-02	22.4	
22	0	338.00*	43	171	1.16	675.94	673	8	3.97E-03	60.7	
23	1	351.92*	234	141	1.42	703.80	699	26	2.16E-02	12.2	2.50E+00
24	1	355.89*	12	147	1.43	711.74	699	26	1.12E-03	209.1	
25	0	386.46	35	137	2.98	772.91	770	10	3.23E-03	65.4	
26	0	533.38	12	104	1.04	1066.96	1061	9	1.10E-03	158.8	
27	0	575.57	21	64	1.07	1151.40	1146	8	1.93E-03	72.0	
28	0	583.64*	79	158	1.51	1167.54	1161	12	7.28E-03	36.1	
29	0	609.42*	173	147	1.60	1219.14	1212	15	1.60E-02	17.4	
30	0	727.85*	21	59	0.65	1456.11	1452	9	1.92E-03	75.9	
31	4	765.96*	16	31	1.45	1532.37	1530	20	1.51E-03	68.6	3.33E+00
32	4	768.94	28	58	1.46	1538.34	1530	20	2.62E-03	52.7	
33	4	772.77	25	61	2.52	1546.00	1530	20	2.30E-03	57.6	
34	0	911.47*	104	45	1.76	1823.53	1816	14	9.61E-03	19.0	
35	0	934.02	15	25	0.72	1868.63	1866	6	1.43E-03	56.4	
36	0	937.33	19	23	0.95	1875.27	1872	7	1.77E-03	48.1	
37	0	940.83	13	33	0.82	1882.27	1878	8	1.24E-03	78.3	
38	0	970.30	84	53	1.76	1941.22	1935	16	7.77E-03	23.1	

Sample ID : G198701056 Acquisition date : 17-DEC-2007 14:29:40

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	989.26	43	47	0.69	1979.16	1972	16	3.98E-03	39.0	
40	0	1120.69	34	50	0.68	2242.09	2237	11	3.13E-03	45.3	
41	0	1306.88	21	52	8.13	2614.54	2594	26	1.99E-03	94.3	
42	0	1378.53	8	25	3.87	2757.88	2751	10	7.41E-04	122.2	
43	0	1461.51*	149	50	2.36	2923.85	2914	18	1.38E-02	14.2	
44	0	1520.05	16	15	3.26	3040.92	3033	16	1.53E-03	59.1	
45	0	1555.70	15	6	1.40	3112.23	3107	12	1.39E-03	41.6	
46	0	1566.34	16	10	5.54	3133.52	3124	19	1.44E-03	54.0	
47	0	1628.00	15	32	7.23	3256.83	3244	21	1.34E-03	100.3	
48	0	1669.03	16	8	4.60	3338.87	3331	15	1.44E-03	46.1	
49	0	1764.85*	20	12	1.66	3530.49	3523	16	1.87E-03	51.2	
50	0	1845.89	15	3	4.89	3692.55	3686	13	1.39E-03	35.5	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701056       *
* Acquisition date : 17-DEC-2007 14:29:40 Detector SN#    :                 *
* Detector ID      : GAM13                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:02.73     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701056           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0633E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 15:48:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	3.096E+00	8.776E-01	5.631E-01	0.000E+00
BI-212	2.179E-01	3.245E-01	4.896E-01	0.000E+00
PB-212	3.807E-01	7.702E-02	7.301E-02	0.000E+00
BI-214	3.981E-01	1.389E-01	1.157E-01	0.000E+00
PB-214	4.103E-01	1.006E-01	9.820E-02	0.000E+00
RA-223	1.895E-01	1.805E-01	2.387E-01	0.000E+00
TH-234	2.885E-01	4.768E-01	4.368E-01	0.000E+00
NP-237	3.692E-01	1.530E-01	1.784E-01	0.000E+00
NP-239	1.745E-01	1.824E-01	2.656E-01	0.000E+00
AM-243	8.421E-02	2.889E-02	3.472E-02	0.000E+00
CF-249	3.777E-02	4.848E-02	5.871E-02	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
CO-60	2.164E-02		3.705E-02	6.506E-02	0.000E+00	NOT IDENT.
RH-101	-1.698E-02		3.042E-02	4.180E-02	0.000E+00	NOT IDENT.
SB-125	5.391E-02		8.164E-02	1.415E-01	0.000E+00	NOT IDENT.
CS-137	6.413E-03		3.802E-02	6.148E-02	0.000E+00	NOT IDENT.
EU-155	2.132E-02		6.129E-02	1.083E-01	0.000E+00	NOT IDENT.
TL-208	0.000E+00		6.767E-02	8.622E-02	0.000E+00	FAIL ABUN
PO-209	4.095E+00		7.078E+00	1.216E+01	0.000E+00	NOT IDENT.
BI-211	1.011E+00		9.823E-01	1.753E+00	0.000E+00	NOT IDENT.
AC-228	0.000E+00		2.287E-01	3.432E-01	0.000E+00	FAIL ABUN
PA-233	2.646E-02		5.112E-02	8.984E-02	0.000E+00	NOT IDENT.
PA-234M	-3.382E+00		5.155E+00	7.174E+00	0.000E+00	NOT IDENT.
U-235	-3.756E-02		1.590E-01	2.535E-01	0.000E+00	NOT IDENT.
NP-236	-3.170E-02		4.075E-02	5.682E-02	0.000E+00	NOT IDENT.
AM-241	1.109E-03		3.986E-02	6.022E-02	0.000E+00	NOT IDENT.
CM-243	-4.174E-02		5.467E-02	9.185E-02	0.000E+00	NOT IDENT.
AM-246	-6.721E-02		1.261E-01	2.005E-01	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:30:26.06

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G198701056.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 14:29:40
Sample ID        : G198701056           Sample quantity  : 1.06330E+02 GRAM
Detector name    : GAM13                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:02.73  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	149	10.66*	1.060E+00	3.096E+00	3.096E+00	28.92
BI-212	727.33	21	11.80*	1.898E+00	2.179E-01	2.179E-01	151.95
	785.37	------	1.10	1.777E+00	------	Line Not Found	------
	1620.50	------	1.49	9.772E-01	------	Line Not Found	------
PB-212	74.81	188	10.40	7.694E+00	5.522E-01	5.522E-01	35.01
	77.11	322	17.50	7.684E+00	5.640E-01	5.640E-01	25.39
	87.30	148	7.81	7.592E+00	5.863E-01	5.863E-01	42.29
	238.63	338	43.30*	4.822E+00	3.807E-01	3.807E-01	20.64
	300.09	------	3.28	4.058E+00	------	Line Not Found	------
BI-214	609.31	173	46.10*	2.218E+00	3.980E-01	3.981E-01	35.62
	768.36	28	4.94	1.809E+00	7.444E-01	7.445E-01	105.58
	806.17	------	1.22	1.737E+00	------	Line Not Found	------
	934.06	15	3.03	1.531E+00	7.839E-01	7.839E-01	113.02
	1120.29	34	15.10	1.314E+00	4.015E-01	4.016E-01	90.78
	1155.19	------	1.63	1.282E+00	------	Line Not Found	------
	1238.11	------	5.79	1.211E+00	------	Line Not Found	------
	1280.96	------	1.43	1.178E+00	------	Line Not Found	------
	1377.67	8	4.00	1.111E+00	4.238E-01	4.239E-01	244.37
	1401.50	------	1.27	1.096E+00	------	Line Not Found	------
	1407.98	------	2.15	1.092E+00	------	Line Not Found	------
	1509.23	------	2.11	1.033E+00	------	Line Not Found	------
	1729.60	------	2.92	9.286E-01	------	Line Not Found	------
	1764.49	20	15.40	9.142E-01	3.370E-01	3.370E-01	102.57
PB-214	74.81	188	6.44	7.694E+00	8.917E-01	8.918E-01	35.01
	77.11	322	10.80	7.684E+00	9.139E-01	9.140E-01	25.39
	87.30	148	4.84	7.592E+00	9.460E-01	9.461E-01	42.29
	242.00	81	7.43	4.777E+00	5.360E-01	5.360E-01	69.54
	295.22	113	19.30	4.111E+00	3.346E-01	3.347E-01	45.12
	351.93	234	37.60*	3.567E+00	4.103E-01	4.103E-01	25.03
RA-223	269.46	49	13.70*	4.399E+00	1.895E-01	1.895E-01	97.16
TH-234	63.29	8	4.80	7.668E+00	5.183E-02	5.183E-02	1213.28
	92.58	50	5.41*	7.520E+00	2.885E-01	2.885E-01	168.63

Sample ID : G198701056 Acquisition date : 17-DEC-2007 14:29:40

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
NP-237	86.48	148	12.40*	7.592E+00	3.692E-01	3.692E-01	42.29
NP-239	228.18	40	10.76*	4.977E+00	1.745E-01	1.745E-01	106.64
AM-243	74.66	188	68.20*	7.694E+00	8.420E-02	8.421E-02	35.01
CF-249	387.59	35	66.00*	3.297E+00	3.776E-02	3.777E-02	130.98

Flag: "*" = Keyline

Sample ID : G198701056 Acquisition date : 17-DEC-2007 14:29:40

Total number of lines in spectrum 50
Number of unidentified lines 25
Number of lines tentatively identified by NID 25 50.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	3.096E+00	3.096E+00	0.896E+00	28.92	
BI-212	4.43E+17S	1.00	2.179E-01	2.179E-01	3.311E-01	151.95	
PB-212	4.43E+17S	1.00	3.807E-01	3.807E-01	0.786E-01	20.64	
BI-214	5.05E+10S	1.00	3.980E-01	3.981E-01	1.418E-01	35.62	
PB-214	5.05E+10S	1.00	4.103E-01	4.103E-01	1.027E-01	25.03	
RA-223	1.04E+12S	1.00	1.895E-01	1.895E-01	1.841E-01	97.16	
TH-234	1.41E+17S	1.00	2.885E-01	2.885E-01	4.866E-01	168.63	
NP-237	6.75E+13S	1.00	3.692E-01	3.692E-01	1.562E-01	42.29	
NP-239	2.33E+11S	1.00	1.745E-01	1.745E-01	1.861E-01	106.64	
AM-243	2.33E+11S	1.00	8.420E-02	8.421E-02	2.948E-02	35.01	
CF-249	1.11E+10S	1.00	3.776E-02	3.777E-02	4.947E-02	130.98	
			---	---			
		Total Activity :	5.647E+00	5.647E+00			

Grand Total Activity : 5.647E+00 5.647E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G198701056 Acquisition date : 17-DEC-2007 14:29:40

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.56	77	365	1.04	92.57	88	9	7.16E-03	****	7.26E+00	
0	53.20	72	398	0.96	105.86	101	10	6.67E-03	****	7.49E+00	
3	80.95	65	330	1.10	161.41	145	20	6.03E-03	****	7.66E+00	
0	84.08	42	273	1.38	167.67	165	6	3.88E-03	****	7.63E+00	
0	112.92	2	233	0.92	225.41	223	6	1.98E-04	****	7.16E+00	
0	128.80	27	213	0.73	257.20	254	6	2.49E-03	****	6.84E+00	T
0	163.47	4	279	0.90	326.59	323	8	4.12E-04	****	6.12E+00	
0	185.84	15	349	0.97	371.38	366	11	1.39E-03	****	5.69E+00	
0	202.26	36	211	0.68	404.23	401	7	3.34E-03	****	5.40E+00	
0	252.66	21	228	1.28	505.11	498	9	1.96E-03	****	4.63E+00	
1	292.69	27	45	1.10	585.24	584	19	2.50E-03	76.9	4.14E+00	
0	338.00	43	171	1.16	675.94	673	8	3.97E-03	****	3.69E+00	T
1	355.89	12	147	1.43	711.74	699	26	1.12E-03	****	3.53E+00	
0	533.38	12	104	1.04	1066.96	1061	9	1.10E-03	****	2.49E+00	
0	575.57	21	64	1.07	1151.40	1146	8	1.93E-03	****	2.33E+00	
0	583.64	79	158	1.51	1167.54	1161	12	7.28E-03	72.3	2.30E+00	T
4	765.96	16	31	1.45	1532.37	1530	20	1.51E-03	****	1.82E+00	
4	772.77	25	61	2.52	1546.00	1530	20	2.30E-03	****	1.80E+00	
0	911.47	104	45	1.76	1823.53	1816	14	9.61E-03	38.0	1.56E+00	T
0	937.33	19	23	0.95	1875.27	1872	7	1.77E-03	96.1	1.53E+00	
0	940.83	13	33	0.82	1882.27	1878	8	1.24E-03	****	1.52E+00	
0	970.30	84	53	1.76	1941.22	1935	16	7.77E-03	46.3	1.48E+00	T
0	989.26	43	47	0.69	1979.16	1972	16	3.98E-03	78.1	1.46E+00	
0	1306.88	21	52	8.13	2614.54	2594	26	1.99E-03	****	1.16E+00	
0	1520.05	16	15	3.26	3040.92	3033	16	1.53E-03	****	1.03E+00	
0	1555.70	15	6	1.40	3112.23	3107	12	1.39E-03	83.3	1.01E+00	
0	1566.34	16	10	5.54	3133.52	3124	19	1.44E-03	****	1.00E+00	
0	1628.00	15	32	7.23	3256.83	3244	21	1.34E-03	****	9.74E-01	
0	1669.03	16	8	4.60	3338.87	3331	15	1.44E-03	92.3	9.55E-01	
0	1845.89	15	3	4.89	3692.55	3686	13	1.39E-03	71.0	8.83E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G198701056            *
* Acquisition date : 17-DEC-2007 14:29:40 Detector SN#    :                 *
* Detector ID      : GAM13                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:02.73     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G198701056           Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.0633E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 15:48:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	3.096E+00	8.776E-01	2.817E-01	8.776E-01
BI-212	2.179E-01	3.245E-01	2.449E-01	3.245E-01
PB-212	3.807E-01	7.702E-02	3.653E-02	7.702E-02
BI-214	3.981E-01	1.389E-01	5.787E-02	1.389E-01
PB-214	4.103E-01	1.006E-01	4.913E-02	1.006E-01
RA-223	1.895E-01	1.805E-01	1.194E-01	1.805E-01
TH-234	2.885E-01	4.768E-01	2.185E-01	4.768E-01
NP-237	3.692E-01	1.530E-01	8.925E-02	1.530E-01
NP-239	1.745E-01	1.824E-01	1.329E-01	1.824E-01
AM-243	8.421E-02	2.889E-02	1.737E-02	2.889E-02
CF-249	3.777E-02	4.848E-02	2.937E-02	4.848E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	2.164E-02	3.705E-02	3.255E-02	3.705E-02	NOT IDENT.
RH-101	-1.698E-02	3.042E-02	2.091E-02	3.042E-02	NOT IDENT.
SB-125	5.391E-02	8.164E-02	7.081E-02	8.164E-02	NOT IDENT.
CS-137	6.413E-03	3.802E-02	3.076E-02	3.802E-02	NOT IDENT.
EU-155	2.132E-02	6.129E-02	5.416E-02	6.129E-02	NOT IDENT.
TL-208	9.505E-02	6.767E-02	4.314E-02	6.767E-02	FAIL ABUN
PO-209	4.095E+00	7.078E+00	6.083E+00	7.078E+00	NOT IDENT.
BI-211	1.011E+00	9.823E-01	8.768E-01	9.823E-01	NOT IDENT.
AC-228	6.055E-01	2.287E-01	1.717E-01	2.287E-01	FAIL ABUN
PA-233	2.646E-02	5.112E-02	4.495E-02	5.112E-02	NOT IDENT.
PA-234M	-3.382E+00	5.155E+00	3.589E+00	5.155E+00	NOT IDENT.
U-235	-3.756E-02	1.590E-01	1.268E-01	1.590E-01	NOT IDENT.
NP-236	-3.170E-02	4.075E-02	2.843E-02	4.075E-02	NOT IDENT.
AM-241	1.109E-03	3.986E-02	3.013E-02	3.986E-02	NOT IDENT.
CM-243	-4.174E-02	5.467E-02	4.595E-02	5.467E-02	NOT IDENT.
AM-246	-6.721E-02	1.261E-01	1.003E-01	1.261E-01	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	220.2092
63.29	252.6045
74.66	271.7559
74.81	271.8943
74.81	271.8943
77.11	274.0134
77.11	274.0134
86.48	231.9190
87.30	308.3136
87.30	308.3136
92.58	259.2748
98.44	220.5515
103.76	225.0809
105.31	203.8470
129.07	239.3971
143.76	210.2475
198.00	208.3281
209.25	208.7422
228.18	167.6682
238.63	192.8029
242.00	193.6866
269.46	172.8075
270.25	181.6616
277.36	153.7413
295.22	162.4723
300.09	145.3845
312.17	137.6705
338.32	168.2925
351.93	144.4301
387.59	135.3481
409.46	119.5994
427.87	101.7578
463.00	111.0903
510.77	118.4484
583.19	99.5131
609.31	117.2248
661.66	80.9372
727.33	101.0889
763.13	63.4974
768.36	89.8186
785.37	70.7974
794.95	65.9008
806.17	71.5162
831.80	56.4218
860.56	71.1965
896.60	55.9045
911.20	68.0275
934.06	62.0624
964.77	78.9756
968.97	69.4236
1001.03	52.4700
1078.86	58.9697
1120.29	59.8657
1155.19	44.4458
1173.23	42.6904
1238.11	45.7062
1280.96	40.0225
1332.51	52.4433
1377.67	37.1973
1401.50	37.4595
1407.98	33.7764
1460.80	34.2912
1509.23	30.1502
1588.20	24.6486
1620.50	22.6183
1729.60	22.4734
1764.49	21.6313

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G198701056

Total Uranium Activity	-1.7378E-02	ug/g
Total Uranium Counting Unc.	7.3576E-02	ug/g
Total Uranium Tpu	7.3576E-08	ug/g
Total Uranium Mda	5.8692E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:31:06.81

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473846.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 17-DEC-2007 14:30:37
Sample ID        : G1201473846          Sample quantity  : 1.61180E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:02.97  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.25*	15	203	0.91	126.96	123	10	1.38E-03	222.6	
2	0	139.54	18	122	0.90	279.41	275	8	1.65E-03	110.0	
3	0	144.24*	16	100	0.82	288.79	286	7	1.49E-03	122.6	
4	0	147.50	16	118	1.40	295.30	293	8	1.45E-03	122.6	
5	0	200.06*	4	131	1.52	400.34	391	11	3.92E-04	573.4	
6	0	338.69*	21	57	1.21	677.37	673	8	1.94E-03	71.8	
7	0	352.52*	0	79	1.16	705.00	699	11	1.55E-05	*****	
8	4	657.26	19	26	2.15	1314.04	1307	26	1.78E-03	54.8	1.37E+00
9	4	662.42*	20	15	2.15	1324.36	1307	26	1.88E-03	61.7	
10	0	823.58	20	61	4.35	1646.50	1631	27	1.81E-03	113.1	
11	0	881.99	12	15	1.20	1763.24	1757	9	1.10E-03	66.5	
12	0	901.14	12	17	0.44	1801.52	1797	9	1.13E-03	71.0	
13	1	904.04	22	3	1.78	1807.32	1805	34	2.00E-03	22.1	1.04E+00
14	1	910.79*	6	13	1.78	1820.81	1805	34	5.69E-04	174.9	
15	0	926.91	10	5	1.67	1853.04	1850	6	9.57E-04	45.1	
16	0	1002.10	13	8	1.86	2003.33	1999	7	1.22E-03	45.8	
17	0	1084.35	13	14	4.38	2167.77	2160	14	1.20E-03	67.1	
18	0	1128.47	6	12	0.48	2255.96	2250	7	5.63E-04	103.2	
19	0	1310.96	12	3	3.18	2620.79	2616	10	1.15E-03	37.3	
20	0	1518.91	21	0	0.74	3036.57	3030	14	1.94E-03	21.8	
21	0	1553.66	15	0	2.35	3106.07	3100	11	1.39E-03	25.8	
22	0	1568.99	9	5	0.91	3136.72	3130	11	8.40E-04	59.5	
23	0	1873.91	8	2	1.47	3746.45	3742	8	7.55E-04	45.9	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473846      *
* Acquisition date : 17-DEC-2007 14:30:37 Detector SN#    :                 *
* Detector ID      : GAM17                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:02.97     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473846          Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.6118E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
CS-137	2.078E-02	2.516E-02	2.675E-02	0.000E+00
PA-234M	1.982E+00	1.786E+00	3.435E+00	0.000E+00
U-235	3.759E-02	9.038E-02	1.186E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
K-40	-8.235E-02		2.227E-01	3.749E-01	0.000E+00	NOT IDENT.
CO-60	4.376E-03		1.945E-02	3.385E-02	0.000E+00	NOT IDENT.
RH-101	-6.883E-03		1.403E-02	2.134E-02	0.000E+00	NOT IDENT.
SB-125	3.111E-02		3.534E-02	6.793E-02	0.000E+00	NOT IDENT.
EU-155	-1.646E-02		3.233E-02	5.113E-02	0.000E+00	NOT IDENT.
TL-208	-7.577E-03		2.098E-02	3.302E-02	0.000E+00	NOT IDENT.
PO-209	1.544E+00		4.335E+00	6.918E+00	0.000E+00	NOT IDENT.
BI-211	2.231E-01		5.077E-01	8.343E-01	0.000E+00	NOT IDENT.
BI-212	-2.832E-02		1.582E-01	2.415E-01	0.000E+00	NOT IDENT.
PB-212	-6.296E-03		2.766E-02	4.781E-02	0.000E+00	NOT IDENT.
BI-214	2.954E-02		4.345E-02	7.438E-02	0.000E+00	NOT IDENT.
PB-214	2.161E-04		4.868E-02	6.132E-02	0.000E+00	FAIL ABUN
RA-223	2.099E-02		7.009E-02	1.235E-01	0.000E+00	NOT IDENT.
AC-228	2.771E-02		9.500E-02	1.384E-01	0.000E+00	FAIL ABUN
PA-233	-3.773E-03		2.413E-02	4.341E-02	0.000E+00	NOT IDENT.
TH-234	-2.883E-01		2.103E-01	4.367E-01	0.000E+00	FAIL ABUN
NP-236	5.718E-03		1.895E-02	3.243E-02	0.000E+00	NOT IDENT.
NP-237	-4.766E-02		5.792E-02	1.041E-01	0.000E+00	NOT IDENT.
NP-239	-1.247E-02		7.867E-02	1.352E-01	0.000E+00	NOT IDENT.
AM-241	7.380E-03		1.805E-02	3.238E-02	0.000E+00	NOT IDENT.
AM-243	-1.014E-02		1.163E-02	1.988E-02	0.000E+00	NOT IDENT.
CM-243	-7.949E-03		2.914E-02	4.688E-02	0.000E+00	NOT IDENT.
AM-246	7.573E-02		6.290E-02	1.171E-01	0.000E+00	NOT IDENT.
CF-249	-2.178E-02		1.695E-02	2.665E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:31:07.55

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473846.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 17-DEC-2007 14:30:37
Sample ID        : G1201473846          Sample quantity  : 1.61180E+02 GRAM
Detector name    : GAM17                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:02.97  0.0%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
CS-137	661.66	20	85.10*	1.788E+00	2.076E-02	2.078E-02	123.57
PA-234M	1001.03	13	0.84*	1.226E+00	1.982E+00	1.982E+00	91.93
U-235	143.76	16	10.96*	6.055E+00	3.759E-02	3.759E-02	245.36

Flag: "*" = Keyline

Sample ID : G1201473846 Acquisition date : 17-DEC-2007 14:30:37

Total number of lines in spectrum 23
Number of unidentified lines 16
Number of lines tentatively identified by NID 7 30.43%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CS-137	9.47E+08S	1.00	2.076E-02	2.078E-02	2.568E-02	123.57	
PA-234M	1.41E+17S	1.00	1.982E+00	1.982E+00	1.822E+00	91.93	
U-235	2.22E+16S	1.00	3.759E-02	3.759E-02	9.222E-02	245.36	
			---	---			
	Total Activity :		2.040E+00	2.041E+00			

Grand Total Activity : 2.040E+00 2.041E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473846 Acquisition date : 17-DEC-2007 14:30:37

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	63.25	15	203	0.91	126.96	123	10	1.38E-03	****	7.00E+00	T
0	139.54	18	122	0.90	279.41	275	8	1.65E-03	****	6.15E+00	
0	147.50	16	118	1.40	295.30	293	8	1.45E-03	****	5.99E+00	
0	200.06	4	131	1.52	400.34	391	11	3.92E-04	****	5.02E+00	
0	338.69	21	57	1.21	677.37	673	8	1.94E-03	****	3.32E+00	T
4	657.26	19	26	2.15	1314.04	1307	26	1.78E-03	****	1.80E+00	
0	823.58	20	61	4.35	1646.50	1631	27	1.81E-03	****	1.46E+00	
0	881.99	12	15	1.20	1763.24	1757	9	1.10E-03	****	1.37E+00	
0	901.14	12	17	0.44	1801.52	1797	9	1.13E-03	****	1.35E+00	
1	904.04	22	3	1.78	1807.32	1805	34	2.00E-03	44.2	1.34E+00	
1	910.79	6	13	1.78	1820.81	1805	34	5.69E-04	****	1.33E+00	T
0	926.91	10	5	1.67	1853.04	1850	6	9.57E-04	90.3	1.31E+00	
0	1084.35	13	14	4.38	2167.77	2160	14	1.20E-03	****	1.14E+00	
0	1128.47	6	12	0.48	2255.96	2250	7	5.63E-04	****	1.11E+00	
0	1310.96	12	3	3.18	2620.79	2616	10	1.15E-03	74.6	9.74E-01	
0	1518.91	21	0	0.74	3036.57	3030	14	1.94E-03	43.6	8.65E-01	
0	1553.66	15	0	2.35	3106.07	3100	11	1.39E-03	51.6	8.50E-01	
0	1568.99	9	5	0.91	3136.72	3130	11	8.40E-04	****	8.43E-01	
0	1873.91	8	2	1.47	3746.45	3742	8	7.55E-04	91.8	7.36E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473846          *
* Acquisition date : 17-DEC-2007 14:30:37 Detector SN#    :                *
* Detector ID      : GAM17                Sensitivity     : 3.000          *
* Geometry         : CAN                  Energy tolerance: 2.000          *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 03:00:02.97     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473846          Analyst initials: MJH1           *
* Batch Number     : 708133               Sample Quantity : 1.6118E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  5-FEB-2007 16:40:35 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
CS-137	2.078E-02	2.516E-02	1.339E-02	2.516E-02
PA-234M	1.982E+00	1.786E+00	1.719E+00	1.786E+00
U-235	3.759E-02	9.038E-02	5.935E-02	9.038E-02

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
K-40	-8.235E-02	2.227E-01	1.875E-01	2.227E-01	NOT IDENT.
CO-60	4.376E-03	1.945E-02	1.693E-02	1.945E-02	NOT IDENT.
RH-101	-6.883E-03	1.403E-02	1.068E-02	1.403E-02	NOT IDENT.
SB-125	3.111E-02	3.534E-02	3.399E-02	3.534E-02	NOT IDENT.
EU-155	-1.646E-02	3.233E-02	2.558E-02	3.233E-02	NOT IDENT.
TL-208	-7.577E-03	2.098E-02	1.652E-02	2.098E-02	NOT IDENT.
PO-209	1.544E+00	4.335E+00	3.461E+00	4.335E+00	NOT IDENT.
BI-211	2.231E-01	5.077E-01	4.174E-01	5.077E-01	NOT IDENT.
BI-212	-2.832E-02	1.582E-01	1.208E-01	1.582E-01	NOT IDENT.
PB-212	-6.296E-03	2.766E-02	2.392E-02	2.766E-02	NOT IDENT.
BI-214	2.954E-02	4.345E-02	3.721E-02	4.345E-02	NOT IDENT.
PB-214	2.161E-04	4.868E-02	3.068E-02	4.868E-02	FAIL ABUN
RA-223	2.099E-02	7.009E-02	6.177E-02	7.009E-02	NOT IDENT.
AC-228	2.771E-02	9.500E-02	6.925E-02	9.500E-02	FAIL ABUN
PA-233	-3.773E-03	2.413E-02	2.172E-02	2.413E-02	NOT IDENT.
TH-234	-2.883E-01	2.103E-01	2.185E-01	2.103E-01	FAIL ABUN
NP-236	5.718E-03	1.895E-02	1.623E-02	1.895E-02	NOT IDENT.
NP-237	-4.766E-02	5.792E-02	5.207E-02	5.792E-02	NOT IDENT.
NP-239	-1.247E-02	7.867E-02	6.766E-02	7.867E-02	NOT IDENT.
AM-241	7.380E-03	1.805E-02	1.620E-02	1.805E-02	NOT IDENT.
AM-243	-1.014E-02	1.163E-02	9.945E-03	1.163E-02	NOT IDENT.
CM-243	-7.949E-03	2.914E-02	2.346E-02	2.914E-02	NOT IDENT.
AM-246	7.573E-02	6.290E-02	5.860E-02	6.290E-02	NOT IDENT.
CF-249	-2.178E-02	1.695E-02	1.333E-02	1.695E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	90.0445
63.29	121.1939
74.66	141.3308
74.81	137.8206
74.81	137.8206
77.11	142.9818
77.11	142.9818
86.48	134.8559
87.30	147.8540
87.30	147.8540
92.58	131.8609
98.44	93.2261
103.76	80.9452
105.31	87.7722
129.07	96.1385
143.76	102.2355
198.00	100.8427
209.25	74.9444
228.18	78.6558
238.63	75.0008
242.00	114.5560
269.46	71.4352
270.25	84.1686
277.36	76.5784
295.22	72.4557
300.09	62.9906
312.17	64.5095
338.32	63.0924
351.93	60.9636
387.59	73.8855
409.46	53.8253
427.87	35.0134
463.00	41.7372
510.77	65.3589
583.19	43.4837
609.31	45.1159
661.66	29.7150
727.33	33.5132
763.13	34.0064
768.36	23.9465
785.37	34.3072
794.95	32.5741
806.17	32.7151
831.80	22.0220
860.56	27.6619
896.60	28.9863
911.20	21.0414
934.06	35.2362
964.77	34.6121
968.97	25.7474
1001.03	23.0152
1078.86	10.2520
1120.29	16.1450
1155.19	23.0646
1173.23	21.0752
1238.11	17.1641
1280.96	13.0201
1332.51	21.9902
1377.67	8.3397
1401.50	13.9807
1407.98	15.8697
1460.80	16.0710
1509.23	13.3836
1588.20	11.6758
1620.50	13.7174
1729.60	3.0071
1764.49	10.0944

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473846

Total Uranium Activity	1.7391E-02	ug/g
Total Uranium Counting Unc.	4.1817E-02	ug/g
Total Uranium Tpu	4.1817E-08	ug/g
Total Uranium Mda	2.7460E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:31:51.39

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473847.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 14:31:03
Sample ID        : G1201473847          Sample quantity  : 1.49080E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:17.69  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.93	76	274	0.99	92.95	89	9	6.99E-03	41.6	
2	4	60.29	42	234	1.35	119.64	117	13	3.93E-03	59.1	8.91E-01
3	4	63.38	84	334	1.37	125.81	117	13	7.82E-03	38.7	
4	3	74.95	468	527	1.86	148.92	142	20	4.33E-02	11.2	8.42E-01
5	3	77.27*	637	366	1.26	153.55	142	20	5.90E-02	7.0	
6	0	87.23	188	394	1.33	173.45	170	7	1.74E-02	19.0	
7	0	92.98	202	437	1.16	184.92	182	10	1.87E-02	20.7	
8	0	99.56	58	425	0.73	198.08	192	11	5.35E-03	70.4	
9	0	116.80	45	344	2.84	232.50	229	11	4.21E-03	81.7	
10	0	129.26	54	312	1.12	257.40	253	9	5.04E-03	60.0	
11	0	185.99*	259	265	1.76	370.70	366	10	2.40E-02	13.7	
12	0	208.89	61	312	1.44	416.46	412	10	5.65E-03	55.5	
13	3	238.67*	851	185	1.46	475.94	467	22	7.88E-02	4.7	1.74E+00
14	3	241.96	277	227	2.10	482.51	467	22	2.56E-02	16.0	
15	0	270.62	58	237	1.95	539.77	532	13	5.38E-03	56.5	
16	0	278.21	75	157	0.95	554.92	551	11	6.99E-03	34.3	
17	0	295.32*	347	178	1.60	589.12	584	10	3.21E-02	9.3	
18	0	300.24	74	148	1.46	598.94	595	9	6.86E-03	31.8	
19	0	327.53	54	158	0.69	653.48	648	13	4.99E-03	50.1	
20	0	338.55	223	100	1.51	675.49	670	13	2.06E-02	11.5	
21	0	352.11*	604	184	1.57	702.58	696	14	5.59E-02	6.4	
22	0	412.68	13	114	0.74	823.62	817	11	1.23E-03	159.1	
23	0	494.96	30	139	4.69	988.05	972	21	2.81E-03	99.6	
24	0	510.70*	33	201	2.65	1019.51	1011	25	3.05E-03	126.1	
25	0	556.31	31	119	7.13	1110.67	1089	25	2.83E-03	99.8	
26	0	569.78*	43	116	2.19	1137.59	1128	14	3.95E-03	57.0	
27	0	583.43*	179	88	1.57	1164.89	1159	15	1.66E-02	14.4	
28	0	609.39*	387	70	1.69	1216.78	1210	14	3.58E-02	7.1	
29	0	661.92	159	78	1.60	1321.80	1315	12	1.48E-02	13.6	
30	0	727.07*	45	36	1.17	1452.05	1446	12	4.17E-03	32.5	
31	0	770.15	68	39	3.23	1538.19	1532	16	6.26E-03	25.6	
32	0	794.78	38	31	0.93	1587.43	1581	12	3.48E-03	34.5	
33	0	848.65	27	139	11.49	1695.18	1662	43	2.51E-03	150.9	
34	0	861.20	37	46	1.53	1720.27	1714	12	3.39E-03	41.1	
35	0	911.47	124	32	1.65	1820.81	1814	13	1.14E-02	13.1	
36	0	959.52	14	39	5.45	1916.93	1897	21	1.27E-03	120.3	
37	0	968.95	96	52	1.70	1935.78	1927	16	8.89E-03	19.7	
38	0	988.83	14	28	0.58	1975.56	1968	11	1.25E-03	80.0	

Sample ID : G1201473847 Acquisition date : 17-DEC-2007 14:31:03

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1064.09	15	49	6.77	2126.11	2111	18	1.37E-03	114.9	
40	0	1076.88	11	23	0.86	2151.71	2143	14	1.03E-03	98.3	
41	0	1106.18	13	14	1.62	2210.33	2205	10	1.17E-03	63.8	
42	0	1120.58	92	23	1.98	2239.13	2233	13	8.52E-03	14.9	
43	0	1226.36	11	14	1.12	2450.80	2443	11	9.76E-04	79.6	
44	0	1238.11	35	20	1.01	2474.32	2469	11	3.28E-03	29.3	
45	0	1461.21	190	12	2.60	2920.90	2912	16	1.76E-02	8.3	
46	0	1520.07	11	11	3.72	3038.75	3027	16	1.03E-03	75.4	
47	0	1610.29	11	11	3.53	3219.41	3211	12	1.04E-03	68.1	
48	0	1682.72	11	10	0.49	3364.46	3357	14	1.05E-03	66.9	
49	0	1765.18	76	7	1.67	3529.64	3523	14	7.04E-03	13.6	
50	0	1825.32	9	0	3.37	3650.11	3645	11	8.33E-04	33.3	
51	0	1830.30	5	2	1.04	3660.08	3655	8	4.76E-04	64.5	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473847      *
* Acquisition date : 17-DEC-2007 14:31:03 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:17.69     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473847          Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4908E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	4.034E+00	6.921E-01	3.421E-01	0.000E+00
CS-137	1.926E-01	5.367E-02	4.965E-02	0.000E+00
TL-208	1.900E-01	5.541E-02	3.764E-02	0.000E+00
BI-212	4.311E-01	2.768E-01	3.463E-01	0.000E+00
PB-212	7.005E-01	7.686E-02	5.972E-02	0.000E+00
BI-214	7.867E-01	1.241E-01	8.730E-02	0.000E+00
PB-214	8.421E-01	1.139E-01	7.827E-02	0.000E+00
RA-223	1.703E-01	1.888E-01	1.907E-01	0.000E+00
AC-228	6.809E-01	1.804E-01	1.731E-01	0.000E+00
TH-234	7.440E-01	3.073E-01	4.334E-01	0.000E+00
NP-236	3.082E-02	4.258E-02	4.724E-02	0.000E+00
NP-237	2.975E-01	1.130E-01	1.866E-01	0.000E+00
AM-241	2.355E-02	2.733E-02	5.007E-02	0.000E+00
AM-243	1.332E-01	3.053E-02	2.923E-02	0.000E+00
AM-246	6.722E-02	1.296E-01	1.681E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Act error Ided	MDA (pCi/GRAM)		
CO-60	1.003E-02	2.798E-02	4.934E-02	0.000E+00	NOT IDENT.
RH-101	-1.670E-02	1.977E-02	3.449E-02	0.000E+00	NOT IDENT.
SB-125	8.114E-03	6.505E-02	1.135E-01	0.000E+00	NOT IDENT.
EU-155	7.400E-02	5.639E-02	9.710E-02	0.000E+00	NOT IDENT.
PO-209	1.494E+00	5.473E+00	9.673E+00	0.000E+00	NOT IDENT.
BI-211	-2.597E-01	8.577E-01	1.219E+00	0.000E+00	NOT IDENT.
PA-233	-2.178E-02	4.236E-02	7.259E-02	0.000E+00	NOT IDENT.
PA-234M	-4.729E-01	3.280E+00	5.508E+00	0.000E+00	NOT IDENT.
U-235	1.168E-01	1.147E-01	2.068E-01	0.000E+00	NOT IDENT.
NP-239	6.906E-02	1.377E-01	2.521E-01	0.000E+00	NOT IDENT.
CM-243	1.018E-02	5.379E-02	8.376E-02	0.000E+00	NOT IDENT.
CF-249	2.022E-02	2.769E-02	5.029E-02	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 17:31:52.15

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*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473847.CNF;1
Sample date      : 28-SEP-2007 00:00:00 Acquisition date : 17-DEC-2007 14:31:03
Sample ID        : G1201473847          Sample quantity  : 1.49080E+02 GRAM
Detector name    : GAM21                Detector geometry: CAN
Elapsed live time: 0 03:00:00.00        Elapsed real time: 0 03:00:17.69  0.2%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	190	10.66*	7.432E-01	4.034E+00	4.034E+00	17.50
CS-137	661.66	159	85.10*	1.641E+00	1.916E-01	1.926E-01	28.44
TL-208	277.36	75	6.31	4.067E+00	4.935E-01	4.935E-01	68.84
	510.77	33	22.60	2.160E+00	1.134E-01	1.134E-01	252.34
	583.19	179	84.50*	1.874E+00	1.900E-01	1.900E-01	29.76
	763.13	------	1.81	1.415E+00	------	Line Not Found	------
	860.56	37	12.42	1.250E+00	3.958E-01	3.958E-01	82.61
BI-212	727.33	45	11.80*	1.487E+00	4.311E-01	4.311E-01	65.51
	785.37	------	1.10	1.374E+00	------	Line Not Found	------
	1620.50	------	1.49	6.722E-01	------	Line Not Found	------
PB-212	74.81	468	10.40	8.644E+00	8.735E-01	8.735E-01	23.39
	77.11	637	17.50	8.639E+00	7.078E-01	7.078E-01	15.59
	87.30	188	7.81	8.538E+00	4.724E-01	4.724E-01	38.75
	238.63	851	43.30*	4.707E+00	7.005E-01	7.005E-01	11.20
	300.09	74	3.28	3.771E+00	1.005E+00	1.005E+00	63.90
BI-214	609.31	387	46.10*	1.790E+00	7.866E-01	7.867E-01	16.09
	768.36	68	4.94	1.402E+00	1.639E+00	1.639E+00	51.76
	806.17	------	1.22	1.337E+00	------	Line Not Found	------
	934.06	------	3.03	1.152E+00	------	Line Not Found	------
	1120.29	92	15.10	9.617E-01	1.063E+00	1.064E+00	30.45
	1155.19	------	1.63	9.335E-01	------	Line Not Found	------
	1238.11	35	5.79	8.725E-01	1.177E+00	1.177E+00	58.94
	1280.96	------	1.43	8.442E-01	------	Line Not Found	------
	1377.67	------	4.00	7.867E-01	------	Line Not Found	------
	1401.50	------	1.27	7.738E-01	------	Line Not Found	------
	1407.98	------	2.15	7.704E-01	------	Line Not Found	------
	1509.23	------	2.11	7.203E-01	------	Line Not Found	------
	1729.60	------	2.92	6.308E-01	------	Line Not Found	------
	1764.49	76	15.40	6.183E-01	1.340E+00	1.340E+00	27.87
PB-214	74.81	468	6.44	8.644E+00	1.411E+00	1.411E+00	23.39
	77.11	637	10.80	8.639E+00	1.147E+00	1.147E+00	15.59
	87.30	188	4.84	8.538E+00	7.622E-01	7.623E-01	38.75

Sample ID : G1201473847 Acquisition date : 17-DEC-2007 14:31:03

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
	242.00	277	7.43	4.648E+00	1.345E+00	1.345E+00	32.56
	295.22	347	19.30	3.834E+00	7.872E-01	7.873E-01	19.35
	351.93	604	37.60*	3.203E+00	8.420E-01	8.421E-01	13.80
RA-223	269.46	58	13.70*	4.179E+00	1.703E-01	1.703E-01	113.09
AC-228	129.07	54	2.42	7.439E+00	5.079E-01	5.079E-01	120.40
	209.25	61	3.89	5.301E+00	4.970E-01	4.970E-01	111.18
	270.25	58	3.46	4.179E+00	6.745E-01	6.745E-01	113.09
	338.32	223	11.27	3.336E+00	9.941E-01	9.941E-01	23.49
	409.46	------	1.92	2.733E+00	------	Line Not Found	------
	463.00	------	4.40	2.398E+00	------	Line Not Found	------
	794.95	38	4.25	1.357E+00	1.095E+00	1.095E+00	69.33
	911.20	124	25.80*	1.181E+00	6.809E-01	6.809E-01	27.04
	964.77	------	4.99	1.115E+00	------	Line Not Found	------
	968.97	96	15.80	1.110E+00	9.185E-01	9.185E-01	39.86
	1588.20	------	3.22	6.855E-01	------	Line Not Found	------
TH-234	63.29	84	4.80	8.516E+00	3.468E-01	3.468E-01	77.60
	92.58	202	5.41*	8.434E+00	7.440E-01	7.440E-01	42.15
NP-236	98.44	58	38.00*	8.286E+00	3.082E-02	3.082E-02	140.96
NP-237	86.48	188	12.40*	8.538E+00	2.975E-01	2.975E-01	38.75
AM-241	59.54	42	35.90*	8.429E+00	2.354E-02	2.355E-02	118.43
AM-243	74.66	468	68.20*	8.644E+00	1.332E-01	1.332E-01	23.39
AM-246	1078.86	11	27.80*	1.000E+00	6.722E-02	6.722E-02	196.69

Flag: "*" = Keyline

Sample ID : G1201473847 Acquisition date : 17-DEC-2007 14:31:03

Total number of lines in spectrum 51
Number of unidentified lines 19
Number of lines tentatively identified by NID 32 62.75%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	4.034E+00	4.034E+00	0.706E+00	17.50	
CS-137	9.47E+08S	1.01	1.916E-01	1.926E-01	0.548E-01	28.44	
TL-208	4.43E+17S	1.00	1.900E-01	1.900E-01	0.565E-01	29.76	
BI-212	4.43E+17S	1.00	4.311E-01	4.311E-01	2.824E-01	65.51	
PB-212	4.43E+17S	1.00	7.005E-01	7.005E-01	0.784E-01	11.20	
BI-214	5.05E+10S	1.00	7.866E-01	7.867E-01	1.266E-01	16.09	
PB-214	5.05E+10S	1.00	8.420E-01	8.421E-01	1.162E-01	13.80	
RA-223	1.04E+12S	1.00	1.703E-01	1.703E-01	1.926E-01	113.09	
AC-228	4.43E+17S	1.00	6.809E-01	6.809E-01	1.841E-01	27.04	
TH-234	1.41E+17S	1.00	7.440E-01	7.440E-01	3.136E-01	42.15	
NP-236	4.89E+12S	1.00	3.082E-02	3.082E-02	4.345E-02	140.96	
NP-237	6.75E+13S	1.00	2.975E-01	2.975E-01	1.153E-01	38.75	
AM-241	1.36E+10S	1.00	2.354E-02	2.355E-02	2.789E-02	118.43	
AM-243	2.33E+11S	1.00	1.332E-01	1.332E-01	0.312E-01	23.39	
AM-246	2.18E+11S	1.00	6.722E-02	6.722E-02	13.22E-02	196.69	
			---	---			
	Total Activity :		9.324E+00	9.325E+00			

Grand Total Activity : 9.324E+00 9.325E+00

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473847 Acquisition date : 17-DEC-2007 14:31:03

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.93	76	274	0.99	92.95	89	9	6.99E-03	83.2	7.68E+00	
0	116.80	45	344	2.84	232.50	229	11	4.21E-03	****	7.81E+00	
0	185.99	259	265	1.76	370.70	366	10	2.40E-02	27.4	5.83E+00	
0	327.53	54	158	0.69	653.48	648	13	4.99E-03	****	3.45E+00	
0	412.68	13	114	0.74	823.62	817	11	1.23E-03	****	2.71E+00	
0	494.96	30	139	4.69	988.05	972	21	2.81E-03	****	2.23E+00	
0	556.31	31	119	7.13	1110.67	1089	25	2.83E-03	****	1.97E+00	
0	569.78	43	116	2.19	1137.59	1128	14	3.95E-03	****	1.92E+00	
0	848.65	27	139	11.49	1695.18	1662	43	2.51E-03	****	1.27E+00	
0	959.52	14	39	5.45	1916.93	1897	21	1.27E-03	****	1.12E+00	
0	988.83	14	28	0.58	1975.56	1968	11	1.25E-03	****	1.09E+00	
0	1064.09	15	49	6.77	2126.11	2111	18	1.37E-03	****	1.01E+00	
0	1106.18	13	14	1.62	2210.33	2205	10	1.17E-03	****	9.74E-01	
0	1226.36	11	14	1.12	2450.80	2443	11	9.76E-04	****	8.81E-01	
0	1520.07	11	11	3.72	3038.75	3027	16	1.03E-03	****	7.15E-01	
0	1610.29	11	11	3.53	3219.41	3211	12	1.04E-03	****	6.76E-01	
0	1682.72	11	10	0.49	3364.46	3357	14	1.05E-03	****	6.48E-01	
0	1825.32	9	0	3.37	3650.11	3645	11	8.33E-04	66.7	5.98E-01	
0	1830.30	5	2	1.04	3660.08	3655	8	4.76E-04	****	5.97E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473847           *
* Acquisition date : 17-DEC-2007 14:31:03 Detector SN#    :                 *
* Detector ID      : GAM21                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 03:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 03:00:17.69     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 28-SEP-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473847          Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.4908E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-JUL-2007 16:42:48 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	4.034E+00	6.921E-01	1.711E-01	6.921E-01
CS-137	1.926E-01	5.367E-02	2.484E-02	5.367E-02
TL-208	1.900E-01	5.541E-02	1.883E-02	5.541E-02
BI-212	4.311E-01	2.768E-01	1.733E-01	2.768E-01
PB-212	7.005E-01	7.686E-02	2.988E-02	7.686E-02
BI-214	7.867E-01	1.241E-01	4.367E-02	1.241E-01
PB-214	8.421E-01	1.139E-01	3.916E-02	1.139E-01
RA-223	1.703E-01	1.888E-01	9.541E-02	1.888E-01
AC-228	6.809E-01	1.804E-01	8.660E-02	1.804E-01
TH-234	7.440E-01	3.073E-01	2.168E-01	3.073E-01
NP-236	3.082E-02	4.258E-02	2.364E-02	4.258E-02
NP-237	2.975E-01	1.130E-01	9.335E-02	1.130E-01
AM-241	2.355E-02	2.733E-02	2.505E-02	2.733E-02
AM-243	1.332E-01	3.053E-02	1.462E-02	3.053E-02
AM-246	6.722E-02	1.296E-01	8.410E-02	1.296E-01

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
CO-60	1.003E-02	2.798E-02	2.468E-02	2.798E-02	NOT IDENT.
RH-101	-1.670E-02	1.977E-02	1.725E-02	1.977E-02	NOT IDENT.
SB-125	8.114E-03	6.505E-02	5.678E-02	6.505E-02	NOT IDENT.
EU-155	7.400E-02	5.639E-02	4.858E-02	5.639E-02	NOT IDENT.
PO-209	1.494E+00	5.473E+00	4.839E+00	5.473E+00	NOT IDENT.
BI-211	-2.597E-01	8.577E-01	6.101E-01	8.577E-01	NOT IDENT.
PA-233	-2.178E-02	4.236E-02	3.631E-02	4.236E-02	NOT IDENT.
PA-234M	-4.729E-01	3.280E+00	2.756E+00	3.280E+00	NOT IDENT.
U-235	1.168E-01	1.147E-01	1.035E-01	1.147E-01	NOT IDENT.
NP-239	6.906E-02	1.377E-01	1.261E-01	1.377E-01	NOT IDENT.
CM-243	1.018E-02	5.379E-02	4.191E-02	5.379E-02	NOT IDENT.
CF-249	2.022E-02	2.769E-02	2.516E-02	2.769E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	317.6949
63.29	431.5760
74.66	417.6818
74.81	417.7488
74.81	417.7488
77.11	418.7747
77.11	418.7747
86.48	554.2032
87.30	544.1984
87.30	544.1984
92.58	556.4231
98.44	317.2495
103.76	339.4535
105.31	303.3962
129.07	289.2575
143.76	311.3876
198.00	299.6927
209.25	247.5407
228.18	240.1938
238.63	219.8568
242.00	220.2507
269.46	179.2730
270.25	179.3415
277.36	170.8264
295.22	186.0374
300.09	160.5165
312.17	173.1432
338.32	132.5949
351.93	134.3557
387.59	117.1243
409.46	115.4002
427.87	102.5244
463.00	91.3645
510.77	81.2434
583.19	55.0429
609.31	80.4822
661.66	74.1112
727.33	57.7655
763.13	63.1492
768.36	45.3975
785.37	24.6929
794.95	47.3253
806.17	42.9538
831.80	49.3893
860.56	34.8040
896.60	41.9108
911.20	44.0021
934.06	44.2218
964.77	23.7407
968.97	41.5830
1001.03	41.8616
1078.86	34.7098
1120.29	32.6563
1155.19	34.9255
1173.23	25.7660
1238.11	38.5838
1280.96	24.1652
1332.51	27.5573
1377.67	25.6289
1401.50	21.4404
1407.98	31.1217
1460.80	11.9041
1509.23	14.5383
1588.20	29.3198
1620.50	19.9556
1729.60	10.6164
1764.49	15.2737

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473847

Total Uranium Activity	5.4037E-02	ug/g
Total Uranium Counting Unc.	5.3083E-02	ug/g
Total Uranium Tpu	5.3083E-08	ug/g
Total Uranium Mda	4.7873E-02	ug/g

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:08:23.67

```
*****************************************************************************
*                              GEL Laboratories LLC                          *
*                                2040 Savage Road                            *
*                              Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473848.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 17-DEC-2007 15:07:42
Sample ID        : G1201473848          Sample quantity  : 1.55440E+02 GRAM
Detector name    : GAM11                Detector geometry: CAN
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:02.68  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	59.43	3996	1283	0.99	118.34	113	10	1.11E+00	2.3	
2	2	74.79*	206	644	1.02	149.10	144	14	5.72E-02	21.1	1.30E+00
3	2	77.08*	220	660	1.03	153.67	144	14	6.11E-02	19.8	
4	3	87.95*	5407	551	0.88	175.44	170	13	1.50E+00	1.5	5.11E+00
5	3	90.04	52	409	1.02	179.62	170	13	1.44E-02	80.9	
6	0	92.61*	39	516	1.01	184.76	182	8	1.09E-02	103.7	
7	0	121.99	1974	507	1.02	243.57	239	10	5.48E-01	3.1	
8	0	136.53	228	381	0.95	272.68	269	8	6.33E-02	16.3	
9	0	165.77	879	369	1.01	331.21	327	9	2.44E-01	5.2	
10	0	185.69*	52	354	0.97	371.08	367	9	1.43E-02	68.1	
11	0	209.35	74	263	0.92	418.45	415	8	2.05E-02	39.7	
12	0	238.45*	438	312	0.99	476.69	473	8	1.22E-01	8.5	
13	0	294.96*	153	234	1.47	589.81	585	9	4.26E-02	19.8	
14	0	328.19	36	179	1.27	656.32	652	7	9.99E-03	64.0	
15	0	338.13*	124	230	1.08	676.20	671	10	3.44E-02	24.7	
16	0	351.94*	276	209	1.22	703.84	698	11	7.66E-02	11.9	
17	0	391.66	449	219	1.22	783.35	779	10	1.25E-01	7.8	
18	0	433.41	47	179	2.09	866.91	864	8	1.31E-02	51.0	
19	0	463.06	57	189	1.01	926.25	922	9	1.60E-02	45.1	
20	3	511.08*	38	113	1.74	1022.37	1013	31	1.07E-02	63.0	3.90E+00
21	3	519.46	29	102	1.75	1039.13	1013	31	8.17E-03	70.2	
22	0	583.11*	212	129	1.49	1166.52	1160	14	5.89E-02	13.4	
23	0	609.23*	183	128	1.30	1218.80	1213	10	5.09E-02	13.8	
24	0	661.62	2604	179	1.28	1323.65	1317	13	7.23E-01	2.2	
25	0	683.58	8	103	0.63	1367.61	1366	8	2.15E-03	229.3	
26	0	796.37	35	83	0.58	1593.32	1590	8	9.59E-03	49.3	
27	0	800.06	20	78	1.32	1600.71	1597	8	5.64E-03	78.5	
28	3	857.65	29	71	2.03	1715.95	1713	13	7.99E-03	46.1	2.43E+00
29	3	860.56	48	86	1.57	1721.77	1713	13	1.33E-02	39.0	
30	0	898.12*	428	166	1.72	1796.94	1790	13	1.19E-01	7.9	
31	0	911.23*	95	176	1.59	1823.17	1817	11	2.64E-02	29.0	
32	0	947.79	54	192	4.71	1896.34	1891	17	1.51E-02	60.0	
33	0	957.66	16	147	3.15	1916.09	1911	11	4.37E-03	151.9	
34	0	969.25*	76	155	1.45	1939.29	1934	11	2.11E-02	34.0	
35	0	1037.24	12	109	3.75	2075.34	2067	10	3.40E-03	162.6	
36	0	1106.67	46	185	0.67	2214.27	2205	18	1.29E-02	70.3	
37	0	1155.74	18	73	0.78	2312.45	2308	9	4.98E-03	88.7	
38	0	1173.34	2558	94	1.61	2347.68	2340	15	7.11E-01	2.1	

Sample ID : G1201473848 Acquisition date : 17-DEC-2007 15:07:42

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1204.47	31	31	2.95	2409.96	2405	11	8.53E-03	40.2	
40	0	1242.12	78	22	3.14	2485.30	2473	26	2.16E-02	21.1	
41	0	1332.64	2351	63	1.73	2666.42	2659	16	6.53E-01	2.2	
42	0	1461.71*	37	9	1.79	2924.67	2920	12	1.02E-02	25.6	
43	0	1588.58	17	5	1.50	3178.50	3173	10	4.72E-03	34.6	
44	0	1686.33*	9	7	0.84	3374.05	3364	14	2.55E-03	71.3	
45	0	1764.66*	16	8	2.00	3530.75	3526	9	4.33E-03	44.9	
46	0	1818.77	10	0	0.81	3639.00	3636	8	2.78E-03	31.6	
47	0	1836.29	259	20	2.07	3674.05	3668	17	7.19E-02	7.4	
48	0	1987.99	7	3	0.52	3977.52	3973	9	1.86E-03	67.0	

Flag: "*" = Peak area was modified by background subtraction

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473848      *
* Acquisition date : 17-DEC-2007 15:07:42 Detector SN#    :                 *
* Detector ID      : GAM11                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 01:00:02.68     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473848          Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.5544E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME :  2-OCT-2007 15:05:44 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act error	MDA (pCi/GRAM)	
K-40	1.319E+00	6.669E-01	7.855E-01	0.000E+00
CO-60	8.172E+00	5.472E-01	1.235E-01	0.000E+00
CS-137	5.840E+00	5.051E-01	1.192E-01	0.000E+00
TL-208	4.294E-01	1.162E-01	9.793E-02	0.000E+00
PO-209	2.280E+02	4.042E+01	3.132E+01	0.000E+00
PB-212	8.719E-01	1.537E-01	1.713E-01	0.000E+00
PB-214	8.395E-01	2.011E-01	1.862E-01	0.000E+00
AC-228	9.325E-01	5.369E-01	5.772E-01	0.000E+00
NP-237	2.949E+01	2.313E+00	7.375E-01	0.000E+00
AM-241	1.353E+01	1.044E+00	4.305E-01	0.000E+00
AM-243	2.391E-01	1.001E-01	1.437E-01	0.000E+00

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L. Ided	Act error	MDA (pCi/GRAM)		
RH-101	-4.448E-03		4.763E-02	8.413E-02	0.000E+00	NOT IDENT.
SB-125	9.001E-02		1.628E-01	2.887E-01	0.000E+00	NOT IDENT.
EU-155	-6.776E-02		1.487E-01	2.722E-01	0.000E+00	NOT IDENT.
BI-211	2.521E+00		2.137E+00	3.990E+00	0.000E+00	NOT IDENT.
BI-212	4.424E-01		5.459E-01	9.683E-01	0.000E+00	NOT IDENT.
BI-214	0.000E+00		1.969E-01	3.170E-01	0.000E+00	FAIL ABUN
RA-223	1.580E-02		2.900E-01	5.023E-01	0.000E+00	NOT IDENT.
PA-233	-1.356E-03		1.061E-01	1.806E-01	0.000E+00	NOT IDENT.
PA-234M	2.310E+00		9.827E+00	1.724E+01	0.000E+00	NOT IDENT.
TH-234	4.758E-01		9.675E-01	1.295E+00	0.000E+00	FAIL ABUN
U-235	5.788E-02		2.641E-01	4.857E-01	0.000E+00	NOT IDENT.
NP-236	-2.928E-03		8.097E-02	1.513E-01	0.000E+00	NOT IDENT.
NP-239	-3.269E-02		3.472E-01	6.061E-01	0.000E+00	NOT IDENT.
CM-243	5.217E-02		1.356E-01	2.560E-01	0.000E+00	NOT IDENT.
AM-246	1.390E-01		3.154E-01	5.544E-01	0.000E+00	NOT IDENT.
CF-249	-2.303E-02		7.490E-02	1.161E-01	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 17-DEC-2007 16:08:24.52

```
*****************************************************************************
*                              GEL Laboratories LLC                         *
*                                2040 Savage Road                           *
*                              Charleston, SC 29414                         *
*****************************************************************************
Configuration    : DKA100:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1201473848.CNF;1
Sample date      : 5-DEC-2007 00:00:00. Acquisition date : 17-DEC-2007 15:07:42
Sample ID        : G1201473848          Sample quantity  : 1.55440E+02 GRAM
Detector name    : GAM11                Detector geometry: CAN
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:02.68  0.1%
Energy tolerance : 2.00000 keV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 708133               Detector SN#     :
Matrix Spike ID  :                      LCS ID           : 1032-A
*****************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
K-40	1460.80	37	10.66*	1.266E+00	1.319E+00	1.319E+00	51.60
CO-60	1173.23	2558	100.00*	1.519E+00	8.135E+00	8.172E+00	6.83
	1332.51	2351	100.00	1.363E+00	8.332E+00	8.370E+00	8.41
CS-137	661.66	2604	85.10*	2.533E+00	5.836E+00	5.840E+00	8.83
TL-208	277.36	------	6.31	5.036E+00	------	Line Not Found	------
	510.77	38	22.60	3.147E+00	2.613E-01	2.613E-01	126.16
	583.19	212	84.50*	2.821E+00	4.294E-01	4.294E-01	27.61
	763.13	------	1.81	2.235E+00	------	Line Not Found	------
	860.56	48	12.42	2.007E+00	9.286E-01	9.286E-01	78.53
PO-209	896.60	428	0.47*	1.931E+00	2.279E+02	2.280E+02	18.09
PB-212	74.81	206	10.40	6.097E+00	1.568E+00	1.568E+00	42.70
	77.11	220	17.50	6.328E+00	9.586E-01	9.586E-01	40.19
	87.30	5407	7.81	7.142E+00	4.682E+01	4.682E+01	8.00
	238.63	438	43.30*	5.602E+00	8.719E-01	8.719E-01	17.99
	300.09	------	3.28	4.756E+00	------	Line Not Found	------
PB-214	74.81	206	6.44	6.097E+00	2.532E+00	2.532E+00	42.70
	77.11	220	10.80	6.328E+00	1.553E+00	1.553E+00	40.19
	87.30	5407	4.84	7.142E+00	7.555E+01	7.555E+01	8.00
	242.00	------	7.43	5.545E+00	------	Line Not Found	------
	295.22	153	19.30	4.816E+00	7.962E-01	7.962E-01	40.02
	351.93	276	37.60*	4.221E+00	8.395E-01	8.395E-01	24.45
AC-228	129.07	------	2.42	7.654E+00	------	Line Not Found	------
	209.25	74	3.89	6.106E+00	1.501E+00	1.501E+00	79.69
	270.25	------	3.46	5.131E+00	------	Line Not Found	------
	338.32	124	11.27	4.351E+00	1.220E+00	1.220E+00	49.68
	409.46	------	1.92	3.757E+00	------	Line Not Found	------
	463.00	57	4.40	3.408E+00	1.851E+00	1.851E+00	90.34
	794.95	35	4.25	2.151E+00	1.824E+00	1.824E+00	99.02
	911.20	95	25.80*	1.906E+00	9.325E-01	9.325E-01	58.76
	964.77	------	4.99	1.810E+00	------	Line Not Found	------
	968.97	76	15.80	1.802E+00	1.290E+00	1.290E+00	68.45
	1588.20	17	3.22	1.191E+00	2.140E+00	2.140E+00	69.43

Sample ID : G1201473848 Acquisition date : 17-DEC-2007 15:07:42

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	2-Sigma %Error
NP-237	86.48	5407	12.40*	7.142E+00	2.949E+01	2.949E+01	8.00
AM-241	59.54	3996	35.90*	3.973E+00	1.353E+01	1.353E+01	7.87
AM-243	74.66	206	68.20*	6.097E+00	2.391E-01	2.391E-01	42.70

Flag: "*" = Keyline

Sample ID : G1201473848 Acquisition date : 17-DEC-2007 15:07:42

Total number of lines in spectrum 48
Number of unidentified lines 22
Number of lines tentatively identified by NID 26 54.17%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/GRAM	Decay Corr pCi/GRAM	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	4.03E+16S	1.00	1.319E+00	1.319E+00	0.680E+00	51.60	
CO-60	1.66E+08S	1.00	8.135E+00	8.172E+00	0.558E+00	6.83	
CS-137	9.47E+08S	1.00	5.836E+00	5.840E+00	0.515E+00	8.83	
TL-208	4.43E+17S	1.00	4.294E-01	4.294E-01	1.186E-01	27.61	
PO-209	3.22E+09S	1.00	2.279E+02	2.280E+02	0.412E+02	18.09	
PB-212	4.43E+17S	1.00	8.719E-01	8.719E-01	1.569E-01	17.99	
PB-214	5.05E+10S	1.00	8.395E-01	8.395E-01	2.052E-01	24.45	
AC-228	4.43E+17S	1.00	9.325E-01	9.325E-01	5.479E-01	58.76	
NP-237	6.75E+13S	1.00	2.949E+01	2.949E+01	0.236E+01	8.00	
AM-241	1.36E+10S	1.00	1.353E+01	1.353E+01	0.107E+01	7.87	
AM-243	2.33E+11S	1.00	2.391E-01	2.391E-01	1.021E-01	42.70	
			---	---			
	Total Activity :		2.895E+02	2.896E+02			

Grand Total Activity : 2.895E+02 2.896E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1201473848 Acquisition date : 17-DEC-2007 15:07:42

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	90.04	52	409	1.02	179.62	170	13	1.44E-02	****	7.25E+00	
0	92.61	39	516	1.01	184.76	182	8	1.09E-02	****	7.37E+00	T
0	121.99	1974	507	1.02	243.57	239	10	5.48E-01	6.2	7.72E+00	
0	136.53	228	381	0.95	272.68	269	8	6.33E-02	32.6	7.55E+00	
0	165.77	879	369	1.01	331.21	327	9	2.44E-01	10.4	6.98E+00	
0	185.69	52	354	0.97	371.08	367	9	1.43E-02	****	6.57E+00	
0	328.19	36	179	1.27	656.32	652	7	9.99E-03	****	4.45E+00	
0	391.66	449	219	1.22	783.35	779	10	1.25E-01	15.6	3.89E+00	
0	433.41	47	179	2.09	866.91	864	8	1.31E-02	****	3.59E+00	
3	519.46	29	102	1.75	1039.13	1013	31	8.17E-03	****	3.11E+00	
0	609.23	183	128	1.30	1218.80	1213	10	5.09E-02	27.5	2.72E+00	T
0	683.58	8	103	0.63	1367.61	1366	8	2.15E-03	****	2.46E+00	
0	800.06	20	78	1.32	1600.71	1597	8	5.64E-03	****	2.14E+00	
3	857.65	29	71	2.03	1715.95	1713	13	7.99E-03	92.1	2.01E+00	
0	947.79	54	192	4.71	1896.34	1891	17	1.51E-02	****	1.84E+00	
0	957.66	16	147	3.15	1916.09	1911	11	4.37E-03	****	1.82E+00	
0	1037.24	12	109	3.75	2075.34	2067	10	3.40E-03	****	1.70E+00	
0	1106.67	46	185	0.67	2214.27	2205	18	1.29E-02	****	1.60E+00	
0	1155.74	18	73	0.78	2312.45	2308	9	4.98E-03	****	1.54E+00	T
0	1204.47	31	31	2.95	2409.96	2405	11	8.53E-03	80.5	1.48E+00	
0	1242.12	78	22	3.14	2485.30	2473	26	2.16E-02	42.2	1.45E+00	
0	1686.33	9	7	0.84	3374.05	3364	14	2.55E-03	****	1.15E+00	
0	1764.66	16	8	2.00	3530.75	3526	9	4.33E-03	89.9	1.12E+00	T
0	1818.77	10	0	0.81	3639.00	3636	8	2.78E-03	63.2	1.10E+00	
0	1836.29	259	20	2.07	3674.05	3668	17	7.19E-02	14.8	1.09E+00	
0	1987.99	7	3	0.52	3977.52	3973	9	1.86E-03	****	1.05E+00	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1201473848           *
* Acquisition date : 17-DEC-2007 15:07:42 Detector SN#    :                 *
* Detector ID      : GAM11                Sensitivity     : 3.000           *
* Geometry         : CAN                  Energy tolerance: 2.000           *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 01:00:02.68     Half life ratio : 8.000           *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      :  5-DEC-2007 00:00:00 Nuclide Library :                 *
* Sample ID        : G1201473848          Analyst initials: MJH1            *
* Batch Number     : 708133               Sample Quantity : 1.5544E+02 GRAM *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                  QC DATA                                  *
*                                                                           *
* CALIB. DATE/TIME :  2-OCT-2007 15:05:44 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/GRAM)	Act Error	LC (pCi/GRAM)	TPU
K-40	1.319E+00	6.669E-01	3.930E-01	6.669E-01
CO-60	8.172E+00	5.472E-01	6.178E-02	5.472E-01
CS-137	5.840E+00	5.051E-01	5.961E-02	5.051E-01
TL-208	4.294E-01	1.162E-01	4.899E-02	1.162E-01
PO-209	2.280E+02	4.042E+01	1.567E+01	4.042E+01
PB-212	8.719E-01	1.537E-01	8.571E-02	1.537E-01
PB-214	8.395E-01	2.011E-01	9.315E-02	2.011E-01
AC-228	9.325E-01	5.369E-01	2.888E-01	5.369E-01
NP-237	2.949E+01	2.313E+00	3.690E-01	2.313E+00
AM-241	1.353E+01	1.044E+00	2.154E-01	1.044E+00
AM-243	2.391E-01	1.001E-01	7.190E-02	1.001E-01

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

Nuclide	Key-Line Activity (pCi/GRAM)	K.L Act error	LC (pCi/GRAM)	TPU	
RH-101	-4.448E-03	4.763E-02	4.209E-02	4.763E-02	NOT IDENT.
SB-125	9.001E-02	1.628E-01	1.444E-01	1.628E-01	NOT IDENT.
EU-155	-6.776E-02	1.487E-01	1.362E-01	1.487E-01	NOT IDENT.
BI-211	2.521E+00	2.137E+00	1.996E+00	2.137E+00	NOT IDENT.
BI-212	4.424E-01	5.459E-01	4.844E-01	5.459E-01	NOT IDENT.
BI-214	7.066E-01	1.969E-01	1.586E-01	1.969E-01	FAIL ABUN
RA-223	1.580E-02	2.900E-01	2.513E-01	2.900E-01	NOT IDENT.
PA-233	-1.356E-03	1.061E-01	9.037E-02	1.061E-01	NOT IDENT.
PA-234M	2.310E+00	9.827E+00	8.623E+00	9.827E+00	NOT IDENT.
TH-234	4.758E-01	9.675E-01	6.481E-01	9.675E-01	FAIL ABUN
U-235	5.788E-02	2.641E-01	2.430E-01	2.641E-01	NOT IDENT.
NP-236	-2.928E-03	8.097E-02	7.572E-02	8.097E-02	NOT IDENT.
NP-239	-3.269E-02	3.472E-01	3.032E-01	3.472E-01	NOT IDENT.
CM-243	5.217E-02	1.356E-01	1.281E-01	1.356E-01	NOT IDENT.
AM-246	1.390E-01	3.154E-01	2.774E-01	3.154E-01	NOT IDENT.
CF-249	-2.303E-02	7.490E-02	5.807E-02	7.490E-02	NOT IDENT.

```
*****************************************************************************
*                          GEL Laboratories LLC                             *
*                             2040 SAVAGE ROAD                              *
*                          CHARLESTON ,SC 29417                             *
*                     GAMMA SPECTROSCOPY BACKGROUND REPORT                  *
*****************************************************************************
```

ENERGY	MDA COUNTS
59.54	627.9912
63.29	453.1312
74.66	593.0990
74.81	593.2993
74.81	593.2993
77.11	596.3851
77.11	596.3851
86.48	699.8175
87.30	700.9977
87.30	700.9977
92.58	332.5528
98.44	313.7364
103.76	326.6951
105.31	354.5433
129.07	279.2997
143.76	252.1272
198.00	257.0794
209.25	234.4373
228.18	254.0674
238.63	304.9463
242.00	227.0660
269.46	220.4305
270.25	233.8288
277.36	204.2598
295.22	213.1249
300.09	203.8220
312.17	186.4425
338.32	190.0803
351.93	157.5453
387.59	175.8281
409.46	158.5625
427.87	154.6264
463.00	178.3685
510.77	121.6254
583.19	100.9276
609.31	115.6743
661.66	122.8110
727.33	107.8885
763.13	107.2956
768.36	133.0188
785.37	113.8411
794.95	82.4586
806.17	97.9016
831.80	104.5557
860.56	121.0073
896.60	153.6401
911.20	152.8818
934.06	148.1304
964.77	146.8301
968.97	147.0407
1001.03	112.9039
1078.86	108.7969
1120.29	84.1271
1155.19	81.9611
1173.23	67.1311
1238.11	32.7985
1280.96	31.4341
1332.51	29.7363
1377.67	9.6684
1401.50	23.7746
1407.98	11.9061
1460.80	21.9258
1509.23	33.2651
1588.20	20.6948
1620.50	26.5269
1729.60	11.6348
1764.49	11.7178

TOTAL URANIUM BY GAMMA SPEC REPORT
Sample:G1201473848

Total Uranium Activity	2.6780E-02	ug/g
Total Uranium Counting Unc.	1.2220E-01	ug/g
Total Uranium Tpu	1.2220E-07	ug/g
Total Uranium Mda	1.1242E-01	ug/g

CONTINUING CALIBRATION DATA

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM17_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00 Acquisition date : 12-DEC-2007 07:12:24
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:05.61

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6112E+05+/-3.2007E+04]	8.8040E+05	0.60	
*DECAY CORRECTED ACTIVITY CS-137 [2.8529E+04+/-528.8]	2.8241E+04	-0.54	
*DECAY CORRECTED ACTIVITY CO-60 [4.0368E+04+/-919.5]	3.9948E+04	-0.46	
*DECAY CORRECTED ACTIVITY AM-241 [6.0818E+04+/-667.8]	6.0586E+04	-0.35	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7643E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3227E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6635E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8008E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6157E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3323E+03	
*PEAK FWHM CD-109	7.4630E-01	1.0839E+00	1.0266E+00	
*PEAK FWHM CS-137	1.2763E+00	1.4672E+00	1.3802E+00	
*PEAK FWHM CO-60	1.6103E+00	2.0503E+00	1.8803E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1950E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9517E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	9.9707E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 12 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM21_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 12-DEC-2007 08:07:31
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.43

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2199E+05+/-1.6962E+04]	8.2460E+05	0.15	
*DECAY CORRECTED ACTIVITY CS-137 [2.6347E+04+/-617.7]	2.6386E+04	0.06	
*DECAY CORRECTED ACTIVITY CO-60 [4.0298E+04+/-1103]	4.0361E+04	0.06	
*DECAY CORRECTED ACTIVITY AM-241 [6.5378E+04+/-1219]	6.5702E+04	0.27	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7512E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3209E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6630E+03	
*PEAK ENERGY CD-109	8.6000E+01	9.0000E+01	8.8067E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6148E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3324E+03	
*PEAK FWHM CD-109	1.2623E+00	1.5019E+00	1.3631E+00	
*PEAK FWHM CS-137	1.5605E+00	1.8906E+00	1.7926E+00	
*PEAK FWHM CO-60	1.8533E+00	2.3397E+00	2.0257E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1839E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9663E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3764E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 12 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM23_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 12-DEC-2007 08:07:43
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:03.10

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.7105E+05+/-2.4257E+04]	7.5771E+05	-0.55	
*DECAY CORRECTED ACTIVITY CS-137 [2.5576E+04+/-422.4]	2.4851E+04	-1.72	
*DECAY CORRECTED ACTIVITY CO-60 [4.0337E+04+/-833.8]	3.9924E+04	-0.50	
*DECAY CORRECTED ACTIVITY AM-241 [6.3561E+04+/-1664]	6.3438E+04	-0.07	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7616E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3230E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6647E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8100E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6140E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3319E+03	
*PEAK FWHM CD-109	6.9450E-01	9.5230E-01	7.3046E-01	
*PEAK FWHM CS-137	1.3260E+00	1.5802E+00	1.4327E+00	
*PEAK FWHM CO-60	1.7823E+00	2.2419E+00	2.0030E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1903E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9543E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	8.3797E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: K Approval Date: 12 / 12 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM02_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 13-DEC-2007 07:29:56
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.51

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.9829E+05+/-2.1783E+04]	8.0782E+05	0.44	
*DECAY CORRECTED ACTIVITY CS-137 [2.5417E+04+/-441.8]	2.4858E+04	-1.27	
*DECAY CORRECTED ACTIVITY CO-60 [4.0155E+04+/-741.6]	4.0489E+04	0.45	
*DECAY CORRECTED ACTIVITY AM-241 [6.6459E+04+/-1217]	6.4550E+04	-1.57	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7562E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3216E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6620E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8062E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6155E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3322E+03	
*PEAK FWHM CD-109	8.6870E-01	1.1641E+00	1.0252E+00	
*PEAK FWHM CS-137	1.3890E+00	1.5958E+00	1.4898E+00	
*PEAK FWHM CO-60	1.7960E+00	2.2545E+00	2.0986E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1864E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9545E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0064E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM03_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00 Acquisition date : 13-DEC-2007 05:27:43
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:00.82

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6960E+05+/-1.0766E+05]	7.9542E+05	-0.69	
*DECAY CORRECTED ACTIVITY CS-137 [2.8269E+04+/-721.5]	2.8709E+04	0.61	
*DECAY CORRECTED ACTIVITY CO-60 [4.1409E+04+/-1231]	4.1503E+04	0.08	
*DECAY CORRECTED ACTIVITY AM-241 [6.3249E+04+/-1877]	6.1447E+04	-0.96	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7591E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3224E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6647E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8040E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6171E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3328E+03	
*PEAK FWHM CD-109	8.3610E-01	1.8524E+00	1.2768E+00	
*PEAK FWHM CS-137	1.5869E+00	2.1036E+00	2.0286E+00	
*PEAK FWHM CO-60	2.1075E+00	3.0714E+00	3.0212E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1928E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9691E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3744E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LC Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM05_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2005 12:00:00 Acquisition date : 13-DEC-2007 08:54:03
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.23

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [9.4102E+05+/-1.5120E+04]	9.7254E+05	2.08	Investigate
*DECAY CORRECTED ACTIVITY CS-137 [2.7324E+04+/-449.6]	2.7523E+04	0.44	
*DECAY CORRECTED ACTIVITY CO-60 [4.1154E+04+/-757.2]	4.1340E+04	0.25	
*DECAY CORRECTED ACTIVITY AM-241 [6.9336E+04+/-796.1]	7.1371E+04	2.56	Investigate

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7677E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3236E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6643E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8017E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6194E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3332E+03	
*PEAK FWHM CD-109	1.0354E+00	1.2686E+00	1.1341E+00	
*PEAK FWHM CS-137	1.4355E+00	1.7081E+00	1.5299E+00	
*PEAK FWHM CO-60	1.7629E+00	2.2581E+00	2.0393E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1952E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9376E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1512E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LC Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM06_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2005 12:00:00 Acquisition date : 13-DEC-2007 05:16:08
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.23

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.1697E+05+/-3.2175E+04]	7.8990E+05	-0.84	
*DECAY CORRECTED ACTIVITY CS-137 [2.4416E+04+/-658.7]	2.2481E+04	-2.94	Investigate
*DECAY CORRECTED ACTIVITY CO-60 [3.9594E+04+/-984.4]	4.0341E+04	0.76	
*DECAY CORRECTED ACTIVITY AM-241 [6.7250E+04+/-3025]	6.4207E+04	-1.01	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7529E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3218E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6628E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7648E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6134E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3320E+03	
*PEAK FWHM CD-109	8.8210E-01	1.1228E+00	9.4544E-01	
*PEAK FWHM CS-137	1.2904E+00	1.6432E+00	1.4785E+00	
*PEAK FWHM CO-60	1.6812E+00	2.2061E+00	2.0363E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1837E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9164E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0071E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM11_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 13-DEC-2007 07:15:26
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.58

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.7161E+05+/-5.4538E+04]	8.0483E+05	0.61	
*DECAY CORRECTED ACTIVITY CS-137 [2.5461E+04+/-453.1]	2.5448E+04	-0.03	
*DECAY CORRECTED ACTIVITY CO-60 [4.0000E+04+/-942.5]	3.9965E+04	-0.04	
*DECAY CORRECTED ACTIVITY AM-241 [6.0794E+04+/-2219]	6.0781E+04	-0.01	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7539E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3239E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6666E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7929E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6173E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3327E+03	
*PEAK FWHM CD-109	8.6980E-01	1.0978E+00	1.0467E+00	
*PEAK FWHM CS-137	1.2287E+00	1.4696E+00	1.4105E+00	
*PEAK FWHM CO-60	1.5668E+00	1.9957E+00	1.6901E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1835E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9430E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0008E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM12_CAN.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2005 12:00:00
Elapsed live time: 0 00:05:00.00
Sample quantity : 1.00 EACH
Acquisition date : 13-DEC-2007 07:15:36
Elapsed real time: 0 00:05:02.82

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.4539E+05+/-1.7760E+04]	8.6330E+05	1.01	
*DECAY CORRECTED ACTIVITY CS-137 [2.5327E+04+/-358.0]	2.5251E+04	-0.21	
*DECAY CORRECTED ACTIVITY CO-60 [4.0022E+04+/-687.6]	4.0714E+04	1.01	
*DECAY CORRECTED ACTIVITY AM-241 [6.5836E+04+/-1693]	6.7394E+04	0.92	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7527E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3222E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6629E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8010E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6132E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3318E+03	
*PEAK FWHM CD-109	9.8950E-01	1.3215E+00	1.1338E+00	
*PEAK FWHM CS-137	1.3969E+00	1.7625E+00	1.4804E+00	
*PEAK FWHM CO-60	1.8061E+00	2.2486E+00	1.8994E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1832E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9547E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1296E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM14_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 13-DEC-2007 07:15:51
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.31

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.1190E+05+/-3.9665E+04]	7.7454E+05	-0.94	
*DECAY CORRECTED ACTIVITY CS-137 [2.5426E+04+/-564.0]	2.5355E+04	-0.13	
*DECAY CORRECTED ACTIVITY CO-60 [4.0446E+04+/-915.4]	4.0199E+04	-0.27	
*DECAY CORRECTED ACTIVITY AM-241 [6.6731E+04+/-2639]	6.0287E+04	-2.44	Investigate

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7608E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3230E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6660E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8068E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6160E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3328E+03	
*PEAK FWHM CD-109	1.0337E+00	1.5254E+00	1.3551E+00	
*PEAK FWHM CS-137	1.4334E+00	1.8319E+00	1.6771E+00	
*PEAK FWHM CO-60	1.6848E+00	2.2203E+00	2.1101E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1918E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9606E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.2615E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM16_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 13-DEC-2007 07:16:01
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.27

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2559E+05+/-2.2938E+04]	8.3609E+05	0.46	
*DECAY CORRECTED ACTIVITY CS-137 [2.6207E+04+/-512.6]	2.5773E+04	-0.85	
*DECAY CORRECTED ACTIVITY CO-60 [4.0485E+04+/-767.5]	4.1213E+04	0.95	
*DECAY CORRECTED ACTIVITY AM-241 [6.7162E+04+/-2114]	6.9725E+04	1.21	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7629E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3236E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6653E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8040E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6161E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3322E+03	
*PEAK FWHM CD-109	8.8540E-01	1.2058E+00	1.1783E+00	
*PEAK FWHM CS-137	1.3237E+00	1.6479E+00	1.4949E+00	
*PEAK FWHM CO-60	1.7177E+00	2.1263E+00	2.0718E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1923E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9510E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1277E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM17_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00 Acquisition date : 13-DEC-2007 05:16:20
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:05.53

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6112E+05+/-3.2007E+04]	8.4260E+05	-0.58	
*DECAY CORRECTED ACTIVITY CS-137 [2.8529E+04+/-528.8]	2.8289E+04	-0.45	
*DECAY CORRECTED ACTIVITY CO-60 [4.0368E+04+/-919.5]	3.8666E+04	-1.85	
*DECAY CORRECTED ACTIVITY AM-241 [6.0664E+04+/-829.1]	5.8978E+04	-2.03	Investigate

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7658E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3229E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6638E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8083E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6166E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3324E+03	
*PEAK FWHM CD-109	7.4630E-01	1.0839E+00	9.9048E-01	
*PEAK FWHM CS-137	1.2763E+00	1.4672E+00	1.3040E+00	
*PEAK FWHM CO-60	1.6103E+00	2.0503E+00	1.9053E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1955E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9542E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	7.9896E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM19_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 13-DEC-2007 07:23:16
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.33

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2558E+05+/-2.3590E+04]	7.9121E+05	-1.46	
*DECAY CORRECTED ACTIVITY CS-137 [2.5787E+04+/-427.7]	2.5872E+04	0.20	
*DECAY CORRECTED ACTIVITY CO-60 [3.9967E+04+/-792.7]	4.0092E+04	0.16	
*DECAY CORRECTED ACTIVITY AM-241 [7.0246E+04+/-2114]	6.9446E+04	-0.38	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7597E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3226E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6650E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8200E+01	
*PEAK ENERGY CS-137	6.5964E+02	6.6364E+02	6.6191E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3332E+03	
*PEAK FWHM CD-109	1.1583E+00	1.4038E+00	1.3261E+00	
*PEAK FWHM CS-137	1.5052E+00	1.7317E+00	1.6486E+00	
*PEAK FWHM CO-60	1.7723E+00	2.1545E+00	1.8973E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1897E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9679E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.2411E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12/13/07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM20_2LMB.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2002 12:00:00
Elapsed live time: 0 00:05:00.00
Sample quantity : 1.00 EACH
Acquisition date : 13-DEC-2007 06:12:34
Elapsed real time: 0 00:05:03.30

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.4629E+05+/-8.2185E+04]	7.5140E+05	-1.15	
*DECAY CORRECTED ACTIVITY CS-137 [2.8541E+04+/-525.1]	2.9974E+04	2.73	Investigate
*DECAY CORRECTED ACTIVITY CO-60 [4.0826E+04+/-992.7]	4.0870E+04	0.04	
*DECAY CORRECTED ACTIVITY AM-241 [6.2327E+04+/-1852]	6.1270E+04	-0.57	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7661E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3227E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6657E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8369E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6187E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3332E+03	
*PEAK FWHM CD-109	7.7050E-01	1.3272E+00	1.0691E+00	
*PEAK FWHM CS-137	1.2848E+00	1.6116E+00	1.5187E+00	
*PEAK FWHM CO-60	1.5484E+00	2.0686E+00	1.7453E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1930E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9681E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0669E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM21_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 13-DEC-2007 10:01:27
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.39

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2199E+05+/-1.6962E+04]	7.9399E+05	-1.65	
*DECAY CORRECTED ACTIVITY CS-137 [2.6347E+04+/-617.7]	2.6526E+04	0.29	
*DECAY CORRECTED ACTIVITY CO-60 [4.0298E+04+/-1103]	4.0756E+04	0.41	
*DECAY CORRECTED ACTIVITY AM-241 [6.5328E+04+/-1175]	6.4773E+04	-0.47	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7510E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3209E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6630E+03	
*PEAK ENERGY CD-109	8.6000E+01	9.0000E+01	8.8061E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6147E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3324E+03	
*PEAK FWHM CD-109	1.2623E+00	1.5019E+00	1.3775E+00	
*PEAK FWHM CS-137	1.5605E+00	1.8906E+00	1.6682E+00	
*PEAK FWHM CO-60	1.8533E+00	2.3397E+00	2.1384E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1834E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9640E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3460E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM22_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 13-DEC-2007 08:35:42
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.39

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [6.7938E+05+/-2.3458E+05]	7.7815E+05	0.42	
*DECAY CORRECTED ACTIVITY CS-137 [2.6310E+04+/-489.1]	2.5865E+04	-0.91	
*DECAY CORRECTED ACTIVITY CO-60 [3.8670E+04+/-3834]	4.1266E+04	0.68	
*DECAY CORRECTED ACTIVITY AM-241 [6.1001E+04+/-1634]	6.2715E+04	1.05	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.7600E+02	1.7515E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3215E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6627E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7867E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6121E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3317E+03	
*PEAK FWHM CD-109	1.0000E+00	1.5000E+00	1.1177E+00	
*PEAK FWHM CS-137	1.5000E+00	2.0000E+00	1.8222E+00	
*PEAK FWHM CO-60	2.0000E+00	3.0000E+00	2.6417E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1804E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9295E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1717E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM23_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 13-DEC-2007 04:34:35
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:03.12

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.7105E+05+/-2.4257E+04]	7.8068E+05	0.40	
*DECAY CORRECTED ACTIVITY CS-137 [2.5576E+04+/-422.4]	2.5274E+04	-0.71	
*DECAY CORRECTED ACTIVITY CO-60 [4.0337E+04+/-833.8]	3.9203E+04	-1.36	
*DECAY CORRECTED ACTIVITY AM-241 [6.3653E+04+/-1619]	6.4665E+04	0.63	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7600E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3231E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6647E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8022E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6141E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3319E+03	
*PEAK FWHM CD-109	6.9450E-01	9.5230E-01	8.0509E-01	
*PEAK FWHM CS-137	1.3260E+00	1.5802E+00	1.4478E+00	
*PEAK FWHM CO-60	1.7823E+00	2.2419E+00	2.0275E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1903E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9541E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	7.4759E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.GANALYST.QA]QCC_GAMAN_JAR.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-JAN-2006 12:00:00 Acquisition date : 13-DEC-2007 09:57:01
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.59

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*CD-109 88 KeV Activity [8.4122E+05+/-1.9568E+04]	8.1248E+05	-1.47	
*Cs-137 661 KeV Activity [2.5842E+04+/-486.5]	2.5998E+04	0.32	
*Co-60 1332 KeV Activity [4.1626E+04+/-886.4]	4.2295E+04	0.75	
*DECAY CORRECTED ACTIVITY AM-241 [6.4430E+04+/-2789]	6.4597E+04	0.06	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*CD-109 88 KeV Centroid	1.7200E+02	1.8000E+02	1.7613E+02	
*CD-109 88 KeV FWHM	1.0815E+00	1.3627E+00	1.2530E+00	
*Cs-137 661 KeV Centroid	1.3193E+03	1.3273E+03	1.3226E+03	
*Cs-137 661 KeV FWHM	1.4800E+00	1.7914E+00	1.6288E+00	
*Co-60 1332 KeV Centroid	2.6610E+03	2.6690E+03	2.6645E+03	
*Co-60 1332 KeV FWHM	1.8334E+00	2.3248E+00	2.1901E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1916E+02	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1743E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LC Approval Date: 12 / 13 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM01_2LMB.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2002 12:00:00
Elapsed live time: 0 00:05:00.00

Sample quantity : 1.00 EACH
Acquisition date : 14-DEC-2007 09:42:30
Elapsed real time: 0 00:05:00.99

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6676E+05+/-1.0074E+05]	7.7762E+05	-0.88	
*DECAY CORRECTED ACTIVITY CS-137 [2.8570E+04+/-644.2]	2.8734E+04	0.25	
*DECAY CORRECTED ACTIVITY CO-60 [4.0735E+04+/-1358]	3.9507E+04	-0.90	
*DECAY CORRECTED ACTIVITY AM-241 [6.2918E+04+/-2452]	6.4122E+04	0.49	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7587E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3240E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6660E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7903E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6183E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3328E+03	
*PEAK FWHM CD-109	9.2990E-01	1.7963E+00	1.2672E+00	
*PEAK FWHM CS-137	1.4326E+00	1.9580E+00	1.5929E+00	
*PEAK FWHM CO-60	1.8050E+00	2.2573E+00	1.7652E+00	Below
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1916E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9555E+01	
*PEAK FWHM AM-241	5.0000E-01	1.7500E+00	1.3116E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM02_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 14-DEC-2007 10:05:47
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.53

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.9829E+05+/-2.1783E+04]	7.8232E+05	-0.73	
*DECAY CORRECTED ACTIVITY CS-137 [2.5417E+04+/-441.8]	2.5538E+04	0.28	
*DECAY CORRECTED ACTIVITY CO-60 [4.0155E+04+/-741.6]	4.1102E+04	1.28	
*DECAY CORRECTED ACTIVITY AM-241 [6.6420E+04+/-1173]	6.5955E+04	-0.40	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7557E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3215E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6618E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8040E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6149E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3321E+03	
*PEAK FWHM CD-109	8.6870E-01	1.1641E+00	1.0434E+00	
*PEAK FWHM CS-137	1.3890E+00	1.5958E+00	1.5260E+00	
*PEAK FWHM CO-60	1.7960E+00	2.2545E+00	2.0720E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1860E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9526E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0216E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM03_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00 Acquisition date : 14-DEC-2007 10:13:56
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:00.82

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6960E+05+/-1.0766E+05]	6.5825E+05	-1.96	
*DECAY CORRECTED ACTIVITY CS-137 [2.8269E+04+/-721.5]	2.8512E+04	0.34	
*DECAY CORRECTED ACTIVITY CO-60 [4.1409E+04+/-1231]	4.0179E+04	-1.00	
*DECAY CORRECTED ACTIVITY AM-241 [6.3060E+04+/-1950]	5.9592E+04	-1.78	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7590E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3227E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6652E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8036E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6185E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3330E+03	
*PEAK FWHM CD-109	8.3610E-01	1.8524E+00	1.4615E+00	
*PEAK FWHM CS-137	1.5869E+00	2.1036E+00	1.9846E+00	
*PEAK FWHM CO-60	2.1075E+00	3.0714E+00	2.9283E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1924E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9675E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3847E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM05_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2005 12:00:00 Acquisition date : 14-DEC-2007 04:36:23
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.24

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [9.4102E+05+/-1.5120E+04]	9.7646E+05	2.34	Investigate
*DECAY CORRECTED ACTIVITY CS-137 [2.7324E+04+/-449.6]	2.7062E+04	-0.58	
*DECAY CORRECTED ACTIVITY CO-60 [4.1154E+04+/-757.2]	4.0631E+04	-0.69	
*DECAY CORRECTED ACTIVITY AM-241 [6.9408E+04+/-815.5]	7.0408E+04	1.23	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7654E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3236E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6642E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7903E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6190E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3332E+03	
*PEAK FWHM CD-109	1.0354E+00	1.2686E+00	1.1695E+00	
*PEAK FWHM CS-137	1.4355E+00	1.7081E+00	1.5189E+00	
*PEAK FWHM CO-60	1.7629E+00	2.2581E+00	1.9699E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1943E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9334E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1284E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM06_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2005 12:00:00 Acquisition date : 14-DEC-2007 08:02:57
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.23

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.1697E+05+/-3.2175E+04]	8.1337E+05	-0.11	
*DECAY CORRECTED ACTIVITY CS-137 [2.4416E+04+/-658.7]	2.4183E+04	-0.35	
*DECAY CORRECTED ACTIVITY CO-60 [3.9594E+04+/-984.4]	3.9373E+04	-0.22	
*DECAY CORRECTED ACTIVITY AM-241 [6.6952E+04+/-3089]	6.3383E+04	-1.16	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7523E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3219E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6631E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7622E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6141E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3322E+03	
*PEAK FWHM CD-109	8.8210E-01	1.1228E+00	1.0300E+00	
*PEAK FWHM CS-137	1.2904E+00	1.6432E+00	1.4987E+00	
*PEAK FWHM CO-60	1.6812E+00	2.2061E+00	1.9993E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1821E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9081E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0773E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM07_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 14-DEC-2007 06:32:57
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.02

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.6229E+05+/-4.6983E+04]	7.5669E+05	-0.12	
*DECAY CORRECTED ACTIVITY CS-137 [2.5347E+04+/-581.1]	2.6199E+04	1.47	
*DECAY CORRECTED ACTIVITY CO-60 [4.0193E+04+/-817.5]	3.9645E+04	-0.67	
*DECAY CORRECTED ACTIVITY AM-241 [5.9564E+04+/-1402]	5.8455E+04	-0.79	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7590E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3231E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6647E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8204E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6193E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3329E+03	
*PEAK FWHM CD-109	8.8960E-01	1.2630E+00	9.8135E-01	
*PEAK FWHM CS-137	1.3220E+00	1.6316E+00	1.4719E+00	
*PEAK FWHM CO-60	1.7106E+00	2.2639E+00	1.8822E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1869E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9593E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0273E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LC Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM12_CAN.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2005 12:00:00
Elapsed live time: 0 00:05:00.00

Sample quantity : 1.00 EACH
Acquisition date : 14-DEC-2007 05:26:25
Elapsed real time: 0 00:05:02.84

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.4539E+05+/-1.7760E+04]	8.3195E+05	-0.76	
*DECAY CORRECTED ACTIVITY CS-137 [2.5327E+04+/-358.0]	2.5685E+04	1.00	
*DECAY CORRECTED ACTIVITY CO-60 [4.0022E+04+/-687.6]	4.0411E+04	0.57	
*DECAY CORRECTED ACTIVITY AM-241 [6.6008E+04+/-1736]	6.8073E+04	1.19	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7531E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3222E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6631E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8030E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6136E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3319E+03	
*PEAK FWHM CD-109	9.8950E-01	1.3215E+00	1.1669E+00	
*PEAK FWHM CS-137	1.3969E+00	1.7625E+00	1.4742E+00	
*PEAK FWHM CO-60	1.8061E+00	2.2486E+00	1.9766E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1828E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9529E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1386E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM14_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 14-DEC-2007 08:25:18
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.31

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.1190E+05+/-3.9665E+04]	8.0449E+05	-0.19	
*DECAY CORRECTED ACTIVITY CS-137 [2.5426E+04+/-564.0]	2.5096E+04	-0.59	
*DECAY CORRECTED ACTIVITY CO-60 [4.0446E+04+/-915.4]	3.8740E+04	-1.86	
*DECAY CORRECTED ACTIVITY AM-241 [6.6516E+04+/-2536]	6.2508E+04	-1.58	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7608E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3233E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6661E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8065E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6173E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3329E+03	
*PEAK FWHM CD-109	1.0337E+00	1.5254E+00	1.3761E+00	
*PEAK FWHM CS-137	1.4334E+00	1.8319E+00	1.7805E+00	
*PEAK FWHM CO-60	1.6848E+00	2.2203E+00	2.1612E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1910E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9567E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.5403E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: U Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM16_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 14-DEC-2007 08:34:57
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.24

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2559E+05+/-2.2938E+04]	8.2040E+05	-0.23	
*DECAY CORRECTED ACTIVITY CS-137 [2.6207E+04+/-512.6]	2.5936E+04	-0.53	
*DECAY CORRECTED ACTIVITY CO-60 [4.0485E+04+/-767.5]	3.8784E+04	-2.22	Investigate
*DECAY CORRECTED ACTIVITY AM-241 [6.7121E+04+/-2029]	6.6631E+04	-0.24	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7619E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3234E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6653E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7991E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6153E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3322E+03	
*PEAK FWHM CD-109	8.8540E-01	1.2058E+00	9.3434E-01	
*PEAK FWHM CS-137	1.3237E+00	1.6479E+00	1.4365E+00	
*PEAK FWHM CO-60	1.7177E+00	2.1263E+00	1.9302E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1906E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9424E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	8.9717E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM17_CAN.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2002 12:00:00
Elapsed live time: 0 00:05:00.00

Sample quantity : 1.00 EACH
Acquisition date : 14-DEC-2007 08:08:37
Elapsed real time: 0 00:05:05.65

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6112E+05+/-3.2007E+04]	8.2305E+05	-1.19	
*DECAY CORRECTED ACTIVITY CS-137 [2.8529E+04+/-528.8]	2.7802E+04	-1.38	
*DECAY CORRECTED ACTIVITY CO-60 [4.0368E+04+/-919.5]	3.9327E+04	-1.13	
*DECAY CORRECTED ACTIVITY AM-241 [6.0659E+04+/-794.0]	6.0595E+04	-0.08	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7645E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3226E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6635E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8017E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6155E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3323E+03	
*PEAK FWHM CD-109	7.4630E-01	1.0839E+00	9.7292E-01	
*PEAK FWHM CS-137	1.2763E+00	1.4672E+00	1.3247E+00	
*PEAK FWHM CO-60	1.6103E+00	2.0503E+00	1.8729E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1946E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9494E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	9.8635E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM19_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 14-DEC-2007 07:13:28
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.34

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2558E+05+/-2.3590E+04]	8.5023E+05	1.05	
*DECAY CORRECTED ACTIVITY CS-137 [2.5787E+04+/-427.7]	2.6416E+04	1.47	
*DECAY CORRECTED ACTIVITY CO-60 [3.9967E+04+/-792.7]	3.9664E+04	-0.38	
*DECAY CORRECTED ACTIVITY AM-241 [7.0116E+04+/-2078]	6.8554E+04	-0.75	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7594E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3227E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6651E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8186E+01	
*PEAK ENERGY CS-137	6.5964E+02	6.6364E+02	6.6193E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3333E+03	
*PEAK FWHM CD-109	1.1583E+00	1.4038E+00	1.2620E+00	
*PEAK FWHM CS-137	1.5052E+00	1.7317E+00	1.5819E+00	
*PEAK FWHM CO-60	1.7723E+00	2.1545E+00	1.9675E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1908E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9735E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.2167E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LC Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM20_2LMB.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2002 12:00:00
Elapsed live time: 0 00:05:00.00

Sample quantity : 1.00 EACH
Acquisition date : 14-DEC-2007 07:13:52
Elapsed real time: 0 00:05:03.38

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.4629E+05+/-8.2185E+04]	9.2815E+05	1.00	
*DECAY CORRECTED ACTIVITY CS-137 [2.8541E+04+/-525.1]	2.8848E+04	0.58	
*DECAY CORRECTED ACTIVITY CO-60 [4.0826E+04+/-992.7]	4.1718E+04	0.90	
*DECAY CORRECTED ACTIVITY AM-241 [6.2448E+04+/-1844]	6.4131E+04	0.91	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7614E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3229E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6659E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8134E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6194E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3333E+03	
*PEAK FWHM CD-109	7.7050E-01	1.3272E+00	1.2619E+00	
*PEAK FWHM CS-137	1.2848E+00	1.6116E+00	1.4555E+00	
*PEAK FWHM CO-60	1.5484E+00	2.0686E+00	1.7713E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1932E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9688E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1736E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: _____ Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM21_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 14-DEC-2007 04:36:46
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.44

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2199E+05+/-1.6962E+04]	8.1404E+05	-0.47	
*DECAY CORRECTED ACTIVITY CS-137 [2.6347E+04+/-617.7]	2.7444E+04	1.78	
*DECAY CORRECTED ACTIVITY CO-60 [4.0298E+04+/-1103]	4.0451E+04	0.14	
*DECAY CORRECTED ACTIVITY AM-241 [6.5303E+04+/-1129]	6.5005E+04	-0.26	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7513E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3211E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6633E+03	
*PEAK ENERGY CD-109	8.6000E+01	9.0000E+01	8.8071E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6158E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3325E+03	
*PEAK FWHM CD-109	1.2623E+00	1.5019E+00	1.3759E+00	
*PEAK FWHM CS-137	1.5605E+00	1.8906E+00	1.6742E+00	
*PEAK FWHM CO-60	1.8533E+00	2.3397E+00	2.0377E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1846E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9697E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3610E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LC Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM22_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 14-DEC-2007 04:36:55
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.39

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [6.7938E+05+/-2.3458E+05]	7.5416E+05	0.32	
*DECAY CORRECTED ACTIVITY CS-137 [2.6310E+04+/-489.1]	2.6102E+04	-0.43	
*DECAY CORRECTED ACTIVITY CO-60 [3.8670E+04+/-3834]	4.0479E+04	0.47	
*DECAY CORRECTED ACTIVITY AM-241 [6.0936E+04+/-1594]	6.0034E+04	-0.57	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.7600E+02	1.7510E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3214E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6628E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7840E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6118E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3318E+03	
*PEAK FWHM CD-109	1.0000E+00	1.5000E+00	1.1948E+00	
*PEAK FWHM CS-137	1.5000E+00	2.0000E+00	1.7528E+00	
*PEAK FWHM CO-60	2.0000E+00	3.0000E+00	2.5695E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1810E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9328E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0889E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: LL Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM23_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 14-DEC-2007 04:46:35
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:03.11

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.7105E+05+/-2.4257E+04]	7.8894E+05	0.74	
*DECAY CORRECTED ACTIVITY CS-137 [2.5576E+04+/-422.4]	2.5539E+04	-0.09	
*DECAY CORRECTED ACTIVITY CO-60 [4.0337E+04+/-833.8]	4.0549E+04	0.25	
*DECAY CORRECTED ACTIVITY AM-241 [6.3589E+04+/-1566]	6.2829E+04	-0.49	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7606E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3231E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6648E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8050E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6143E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3320E+03	
*PEAK FWHM CD-109	6.9450E-01	9.5230E-01	7.6177E-01	
*PEAK FWHM CS-137	1.3260E+00	1.5802E+00	1.4651E+00	
*PEAK FWHM CO-60	1.7823E+00	2.2419E+00	1.9958E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1905E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9548E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	8.1300E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: U Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.GANALYST.QA]QCC_GAMAN_JAR.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-JAN-2006 12:00:00 Acquisition date : 14-DEC-2007 15:05:05
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.57

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*CD-109 88 KeV Activity [8.4122E+05+/-1.9568E+04]	8.3632E+05	-0.25	
*Cs-137 661 KeV Activity [2.5842E+04+/-486.5]	2.5751E+04	-0.19	
*Co-60 1332 KeV Activity [4.1626E+04+/-886.4]	3.9927E+04	-1.92	
*DECAY CORRECTED ACTIVITY AM-241 [6.4390E+04+/-2649]	6.3997E+04	-0.15	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*CD-109 88 KeV Centroid	1.7200E+02	1.8000E+02	1.7615E+02	
*CD-109 88 KeV FWHM	1.0815E+00	1.3627E+00	1.3213E+00	
*Cs-137 661 KeV Centroid	1.3193E+03	1.3273E+03	1.3226E+03	
*Cs-137 661 KeV FWHM	1.4800E+00	1.7914E+00	1.6752E+00	
*Co-60 1332 KeV Centroid	2.6610E+03	2.6690E+03	2.6645E+03	
*Co-60 1332 KeV FWHM	1.8334E+00	2.3248E+00	1.9786E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1909E+02	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1810E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MK Approval Date: 12 / 14 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM20_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00 Acquisition date : 16-DEC-2007 11:49:58
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:03.34

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.4629E+05+/-8.2185E+04]	8.8901E+05	0.52	
*DECAY CORRECTED ACTIVITY CS-137 [2.8541E+04+/-525.1]	2.8088E+04	-0.86	
*DECAY CORRECTED ACTIVITY CO-60 [4.0826E+04+/-992.7]	4.0993E+04	0.17	
*DECAY CORRECTED ACTIVITY AM-241 [6.2515E+04+/-1739]	6.2728E+04	0.12	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7601E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3230E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6661E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8071E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6199E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3334E+03	
*PEAK FWHM CD-109	7.7050E-01	1.3272E+00	1.1373E+00	
*PEAK FWHM CS-137	1.2848E+00	1.6116E+00	1.3775E+00	
*PEAK FWHM CO-60	1.5484E+00	2.0686E+00	1.8099E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1921E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9631E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1261E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: mgH Approval Date: 12 / 16 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM21_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 16-DEC-2007 12:05:55
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.35

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2199E+05+/-1.6962E+04]	8.2503E+05	0.18	
*DECAY CORRECTED ACTIVITY CS-137 [2.6347E+04+/-617.7]	2.6227E+04	-0.19	
*DECAY CORRECTED ACTIVITY CO-60 [4.0298E+04+/-1103]	4.1668E+04	1.24	
*DECAY CORRECTED ACTIVITY AM-241 [6.5366E+04+/-1113]	6.6689E+04	1.19	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7521E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3218E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6645E+03	
*PEAK ENERGY CD-109	8.6000E+01	9.0000E+01	8.8116E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6191E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3331E+03	
*PEAK FWHM CD-109	1.2623E+00	1.5019E+00	1.4310E+00	
*PEAK FWHM CS-137	1.5605E+00	1.8906E+00	1.7334E+00	
*PEAK FWHM CO-60	1.8533E+00	2.3397E+00	2.2270E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1856E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9746E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3281E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MGH Approval Date: 12 / 16 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM22_CAN.QAF;1

Sample ID : Calib Check
Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00
Acquisition date : 16-DEC-2007 11:40:44
Elapsed live time: 0 00:05:00.00
Elapsed real time: 0 00:05:02.40

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [6.7938E+05+/-2.3458E+05]	7.5727E+05	0.33	
*DECAY CORRECTED ACTIVITY CS-137 [2.6310E+04+/-489.1]	2.6634E+04	0.66	
*DECAY CORRECTED ACTIVITY CO-60 [3.8670E+04+/-3834]	4.0972E+04	0.60	
*DECAY CORRECTED ACTIVITY AM-241 [6.1099E+04+/-1649]	6.3834E+04	1.66	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.7600E+02	1.7489E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3213E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6627E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7737E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6113E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3317E+03	
*PEAK FWHM CD-109	1.0000E+00	1.5000E+00	1.1531E+00	
*PEAK FWHM CS-137	1.5000E+00	2.0000E+00	1.7585E+00	
*PEAK FWHM CO-60	2.0000E+00	3.0000E+00	2.6175E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1786E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9206E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1431E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: mgh Approval Date: 12 / 16 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM01_2LMB.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2002 12:00:00
Elapsed live time: 0 00:05:00.00

Sample quantity : 1.00 EACH
Acquisition date : 17-DEC-2007 09:31:59
Elapsed real time: 0 00:05:00.98

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6676E+05+/-1.0074E+05]	9.3082E+05	0.64	
*DECAY CORRECTED ACTIVITY CS-137 [2.8570E+04+/-644.2]	2.6974E+04	-2.48	Investigate
*DECAY CORRECTED ACTIVITY CO-60 [4.0735E+04+/-1358]	4.0447E+04	-0.21	
*DECAY CORRECTED ACTIVITY AM-241 [6.3448E+04+/-2719]	6.7949E+04	1.66	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7635E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3236E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6654E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8140E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6166E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3325E+03	
*PEAK FWHM CD-109	9.2990E-01	1.7963E+00	1.4281E+00	
*PEAK FWHM CS-137	1.4326E+00	1.9580E+00	1.6865E+00	
*PEAK FWHM CO-60	1.8050E+00	2.2573E+00	2.0011E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1893E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9439E+01	
*PEAK FWHM AM-241	5.0000E-01	1.7500E+00	1.2718E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM02_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 17-DEC-2007 10:19:50
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.51

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.9829E+05+/-2.1783E+04]	7.8092E+05	-0.80	
*DECAY CORRECTED ACTIVITY CS-137 [2.5417E+04+/-441.8]	2.4543E+04	-1.98	
*DECAY CORRECTED ACTIVITY CO-60 [4.0155E+04+/-741.6]	3.9983E+04	-0.23	
*DECAY CORRECTED ACTIVITY AM-241 [6.6364E+04+/-1149]	6.7314E+04	0.83	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7565E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3217E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6621E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8080E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6157E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3323E+03	
*PEAK FWHM CD-109	8.6870E-01	1.1641E+00	1.0145E+00	
*PEAK FWHM CS-137	1.3890E+00	1.5958E+00	1.5080E+00	
*PEAK FWHM CO-60	1.7960E+00	2.2545E+00	2.0484E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1868E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9565E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	9.8087E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM04_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00 Acquisition date : 17-DEC-2007 10:19:58
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.84

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.5515E+05+/-4.7817E+04]	9.1372E+05	1.22	
*DECAY CORRECTED ACTIVITY CS-137 [2.8765E+04+/-449.3]	2.8661E+04	-0.23	
*DECAY CORRECTED ACTIVITY CO-60 [4.1933E+04+/-722.8]	4.3156E+04	1.69	
*DECAY CORRECTED ACTIVITY AM-241 [5.5614E+04+/-2.3634E+04]	6.5182E+04	0.40	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7690E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3235E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6645E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7999E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6154E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3322E+03	
*PEAK FWHM CD-109	8.5700E-01	1.3096E+00	1.1733E+00	
*PEAK FWHM CS-137	1.4461E+00	1.6731E+00	1.7709E+00	Above*
*PEAK FWHM CO-60	1.8140E+00	2.2910E+00	2.1982E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1998E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9521E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3900E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MGN Approval Date: 12 / 18 / 07

* Co-60 FWHM WITHIN BOUNDS. MONITORING

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM05_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2005 12:00:00 Acquisition date : 17-DEC-2007 09:32:22
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.24

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [9.4102E+05+/-1.5120E+04]	9.2568E+05	-1.01	
*DECAY CORRECTED ACTIVITY CS-137 [2.7324E+04+/-449.6]	2.7740E+04	0.93	
*DECAY CORRECTED ACTIVITY CO-60 [4.1154E+04+/-757.2]	4.1225E+04	0.09	
*DECAY CORRECTED ACTIVITY AM-241 [6.9456E+04+/-806.5]	6.9160E+04	-0.37	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7683E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3238E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6643E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8050E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6201E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3332E+03	
*PEAK FWHM CD-109	1.0354E+00	1.2686E+00	1.1360E+00	
*PEAK FWHM CS-137	1.4355E+00	1.7081E+00	1.5694E+00	
*PEAK FWHM CO-60	1.7629E+00	2.2581E+00	2.0495E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1965E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9443E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0778E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM06_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2005 12:00:00 Acquisition date : 17-DEC-2007 09:32:29
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.24

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.1697E+05+/-3.2175E+04]	8.3192E+05	0.46	
*DECAY CORRECTED ACTIVITY CS-137 [2.4416E+04+/-658.7]	2.4804E+04	0.59	
*DECAY CORRECTED ACTIVITY CO-60 [3.9594E+04+/-984.4]	3.8575E+04	-1.04	
*DECAY CORRECTED ACTIVITY AM-241 [6.7019E+04+/-3032]	6.9344E+04	0.77	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7532E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3219E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6628E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7662E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6138E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3320E+03	
*PEAK FWHM CD-109	8.8210E-01	1.1228E+00	1.0539E+00	
*PEAK FWHM CS-137	1.2904E+00	1.6432E+00	1.5066E+00	
*PEAK FWHM CO-60	1.6812E+00	2.2061E+00	1.9532E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1825E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9103E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0239E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12/17/07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM07_2LMB.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2003 12:00:00
Elapsed live time: 0 00:05:00.00
Sample quantity : 1.00 EACH
Acquisition date : 17-DEC-2007 09:32:35
Elapsed real time: 0 00:05:02.02

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.6229E+05+/-4.6983E+04]	7.3478E+05	-0.59	
*DECAY CORRECTED ACTIVITY CS-137 [2.5347E+04+/-581.1]	2.6491E+04	1.97	
*DECAY CORRECTED ACTIVITY CO-60 [4.0193E+04+/-817.5]	4.1039E+04	1.03	
*DECAY CORRECTED ACTIVITY AM-241 [5.9549E+04+/-1285]	5.9159E+04	-0.30	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7596E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3232E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6651E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8237E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6203E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3331E+03	
*PEAK FWHM CD-109	8.8960E-01	1.2630E+00	1.0605E+00	
*PEAK FWHM CS-137	1.3220E+00	1.6316E+00	1.5573E+00	
*PEAK FWHM CO-60	1.7106E+00	2.2639E+00	1.8668E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1886E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9677E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	9.6000E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM11_2LMB.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2003 12:00:00
Elapsed live time: 0 00:05:00.00
Sample quantity : 1.00 EACH
Acquisition date : 17-DEC-2007 09:46:46
Elapsed real time: 0 00:05:01.59

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.7161E+05+/-5.4538E+04]	8.4967E+05	1.43	
*DECAY CORRECTED ACTIVITY CS-137 [2.5461E+04+/-453.1]	2.5058E+04	-0.89	
*DECAY CORRECTED ACTIVITY CO-60 [4.0000E+04+/-942.5]	4.1090E+04	1.16	
*DECAY CORRECTED ACTIVITY AM-241 [6.0760E+04+/-2104]	5.8689E+04	-0.98	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7548E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3236E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6662E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7970E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6158E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3325E+03	
*PEAK FWHM CD-109	8.6980E-01	1.0978E+00	1.0116E+00	
*PEAK FWHM CS-137	1.2287E+00	1.4696E+00	1.3660E+00	
*PEAK FWHM CO-60	1.5668E+00	1.9957E+00	1.6762E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1844E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9477E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	9.9004E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM12_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2005 12:00:00 Acquisition date : 17-DEC-2007 09:46:54
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.80

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.4539E+05+/-1.7760E+04]	8.3295E+05	-0.70	
*DECAY CORRECTED ACTIVITY CS-137 [2.5327E+04+/-358.0]	2.5418E+04	0.25	
*DECAY CORRECTED ACTIVITY CO-60 [4.0022E+04+/-687.6]	4.0589E+04	0.82	
*DECAY CORRECTED ACTIVITY AM-241 [6.6495E+04+/-1896]	6.7797E+04	0.69	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7535E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3221E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6628E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8049E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6127E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3317E+03	
*PEAK FWHM CD-109	9.8950E-01	1.3215E+00	1.0750E+00	
*PEAK FWHM CS-137	1.3969E+00	1.7625E+00	1.5605E+00	
*PEAK FWHM CO-60	1.8061E+00	2.2486E+00	2.0419E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1831E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9545E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1343E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM13_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00 Acquisition date : 17-DEC-2007 10:01:33
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:03.79

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6479E+05+/-3.5006E+04]	8.7806E+05	0.38	
*DECAY CORRECTED ACTIVITY CS-137 [2.9304E+04+/-484.4]	2.9054E+04	-0.52	
*DECAY CORRECTED ACTIVITY CO-60 [4.1342E+04+/-965.4]	4.0895E+04	-0.46	
*DECAY CORRECTED ACTIVITY AM-241 [6.0271E+04+/-550.4]	5.9546E+04	-1.32	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7589E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3236E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6654E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8185E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6163E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3323E+03	
*PEAK FWHM CD-109	7.0540E-01	1.1577E+00	9.6065E-01	
*PEAK FWHM CS-137	1.3206E+00	1.6654E+00	1.4601E+00	
*PEAK FWHM CO-60	1.7476E+00	2.2429E+00	2.0776E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1881E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9669E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	8.5161E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12/17/07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM14_2LMB.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 17-DEC-2007 09:32:43
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:01.31

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.1190E+05+/-3.9665E+04]	8.6185E+05	1.26	
*DECAY CORRECTED ACTIVITY CS-137 [2.5426E+04+/-564.0]	2.5871E+04	0.79	
*DECAY CORRECTED ACTIVITY CO-60 [4.0446E+04+/-915.4]	3.8781E+04	-1.82	
*DECAY CORRECTED ACTIVITY AM-241 [6.6341E+04+/-2494]	6.4600E+04	-0.70	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7589E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3232E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6660E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7970E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6168E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3329E+03	
*PEAK FWHM CD-109	1.0337E+00	1.5254E+00	1.2639E+00	
*PEAK FWHM CS-137	1.4334E+00	1.8319E+00	1.6126E+00	
*PEAK FWHM CO-60	1.6848E+00	2.2203E+00	1.9543E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1914E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9587E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3728E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM16_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 17-DEC-2007 09:32:50
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.24

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2559E+05+/-2.2938E+04]	8.7002E+05	1.94	
*DECAY CORRECTED ACTIVITY CS-137 [2.6207E+04+/-512.6]	2.5789E+04	-0.82	
*DECAY CORRECTED ACTIVITY CO-60 [4.0485E+04+/-767.5]	3.8971E+04	-1.97	
*DECAY CORRECTED ACTIVITY AM-241 [6.7238E+04+/-1848]	6.7541E+04	0.16	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7627E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3233E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6648E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8030E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6147E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3319E+03	
*PEAK FWHM CD-109	8.8540E-01	1.2058E+00	1.0510E+00	
*PEAK FWHM CS-137	1.3237E+00	1.6479E+00	1.4351E+00	
*PEAK FWHM CO-60	1.7177E+00	2.1263E+00	1.9157E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1922E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9504E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.0017E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM17_CAN.QAF;1

Sample ID : Calib Check
Sample date : 1-APR-2002 12:00:00
Elapsed live time: 0 00:05:00.00
Sample quantity : 1.00 EACH
Acquisition date : 17-DEC-2007 10:08:54
Elapsed real time: 0 00:05:05.55

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.6112E+05+/-3.2007E+04]	8.6448E+05	0.10	
*DECAY CORRECTED ACTIVITY CS-137 [2.8529E+04+/-528.8]	2.8563E+04	0.06	
*DECAY CORRECTED ACTIVITY CO-60 [4.0368E+04+/-919.5]	4.1122E+04	0.82	
*DECAY CORRECTED ACTIVITY AM-241 [6.0612E+04+/-746.5]	5.9935E+04	-0.91	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7674E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3233E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6645E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8163E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6191E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3328E+03	
*PEAK FWHM CD-109	7.4630E-01	1.0839E+00	8.7563E-01	
*PEAK FWHM CS-137	1.2763E+00	1.4672E+00	1.3350E+00	
*PEAK FWHM CO-60	1.6103E+00	2.0503E+00	1.7812E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1978E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9656E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	8.4276E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM19_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 17-DEC-2007 09:47:02
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.31

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2558E+05+/-2.3590E+04]	8.3284E+05	0.31	
*DECAY CORRECTED ACTIVITY CS-137 [2.5787E+04+/-427.7]	2.5926E+04	0.32	
*DECAY CORRECTED ACTIVITY CO-60 [3.9967E+04+/-792.7]	4.1413E+04	1.82	
*DECAY CORRECTED ACTIVITY AM-241 [7.0123E+04+/-1897]	7.0549E+04	0.22	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7591E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3226E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6650E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8173E+01	
*PEAK ENERGY CS-137	6.5964E+02	6.6364E+02	6.6192E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3333E+03	
*PEAK FWHM CD-109	1.1583E+00	1.4038E+00	1.2471E+00	
*PEAK FWHM CS-137	1.5052E+00	1.7317E+00	1.6310E+00	
*PEAK FWHM CO-60	1.7723E+00	2.1545E+00	1.8346E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1895E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9667E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.2697E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MK Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM20_2LMB.QAF;1

Sample ID : Calib Check
Sample quantity : 1.00 EACH
Sample date : 1-APR-2002 12:00:00
Acquisition date : 17-DEC-2007 09:47:10
Elapsed live time: 0 00:05:00.00
Elapsed real time: 0 00:05:03.39

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.4629E+05+/-8.2185E+04]	6.8035E+05	-2.02	Investigate
*DECAY CORRECTED ACTIVITY CS-137 [2.8541E+04+/-525.1]	2.8533E+04	-0.02	
*DECAY CORRECTED ACTIVITY CO-60 [4.0826E+04+/-992.7]	4.0202E+04	-0.63	
*DECAY CORRECTED ACTIVITY AM-241 [6.2644E+04+/-1774]	6.4841E+04	1.24	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7610E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3226E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6654E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8113E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6180E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3330E+03	
*PEAK FWHM CD-109	7.7050E-01	1.3272E+00	1.0824E+00	
*PEAK FWHM CS-137	1.2848E+00	1.6116E+00	1.4437E+00	
*PEAK FWHM CO-60	1.5484E+00	2.0686E+00	1.9747E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1933E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9691E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1124E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM21_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2004 12:00:00 Acquisition date : 17-DEC-2007 09:58:42
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:04.31

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [8.2199E+05+/-1.6962E+04]	8.5409E+05	1.89	
*DECAY CORRECTED ACTIVITY CS-137 [2.6347E+04+/-617.7]	2.5791E+04	-0.90	
*DECAY CORRECTED ACTIVITY CO-60 [4.0298E+04+/-1103]	3.8923E+04	-1.25	
*DECAY CORRECTED ACTIVITY AM-241 [6.5365E+04+/-1075]	6.5336E+04	-0.03	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7508E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3215E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6641E+03	
*PEAK ENERGY CD-109	8.6000E+01	9.0000E+01	8.8048E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6176E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3329E+03	
*PEAK FWHM CD-109	1.2623E+00	1.5019E+00	1.3761E+00	
*PEAK FWHM CS-137	1.5605E+00	1.8906E+00	1.6621E+00	
*PEAK FWHM CO-60	1.8533E+00	2.3397E+00	2.0811E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1835E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9642E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.3565E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM22_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 17-DEC-2007 09:32:58
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:02.41

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [6.7938E+05+/-2.3458E+05]	7.7311E+05	0.40	
*DECAY CORRECTED ACTIVITY CS-137 [2.6310E+04+/-489.1]	2.5695E+04	-1.26	
*DECAY CORRECTED ACTIVITY CO-60 [3.8670E+04+/-3834]	4.0895E+04	0.58	
*DECAY CORRECTED ACTIVITY AM-241 [6.1052E+04+/-1613]	6.0241E+04	-0.50	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.7600E+02	1.7520E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3216E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6630E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.7890E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6126E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3319E+03	
*PEAK FWHM CD-109	1.0000E+00	1.5000E+00	1.1572E+00	
*PEAK FWHM CS-137	1.5000E+00	2.0000E+00	1.7958E+00	
*PEAK FWHM CO-60	2.0000E+00	3.0000E+00	2.6526E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1825E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9402E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	1.1244E+00	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

QA filename : DKA100:[CANBERRA.GAMMA.SCUSR.QA]QCC_GAM23_CAN.QAF;1

Sample ID : Calib Check Sample quantity : 1.00 EACH
Sample date : 1-APR-2003 12:00:00 Acquisition date : 17-DEC-2007 10:01:41
Elapsed live time: 0 00:05:00.00 Elapsed real time: 0 00:05:03.07

Out-of-range Test: N-SIGMA

Parameter Description [Mean+/-Stdev]	Value	Deviation	Flag
*DECAY CORRECTED ACTIVITY CD-109 [7.7105E+05+/-2.4257E+04]	7.3281E+05	-1.58	
*DECAY CORRECTED ACTIVITY CS-137 [2.5576E+04+/-422.4]	2.5391E+04	-0.44	
*DECAY CORRECTED ACTIVITY CO-60 [4.0337E+04+/-833.8]	4.1058E+04	0.86	
*DECAY CORRECTED ACTIVITY AM-241 [6.3565E+04+/-1414]	6.2948E+04	-0.44	

Out-of-range Test: BOUNDARY

Parameter Description	Lower	Upper	Value	Flag
*PEAK CENTROID CD-109	1.7200E+02	1.8000E+02	1.7611E+02	
*PEAK CENTROID CS-137	1.3190E+03	1.3270E+03	1.3231E+03	
*PEAK CENTROID CO-60	2.6610E+03	2.6690E+03	2.6648E+03	
*PEAK ENERGY CD-109	8.6030E+01	9.0030E+01	8.8076E+01	
*PEAK ENERGY CS-137	6.5966E+02	6.6366E+02	6.6145E+02	
*PEAK ENERGY CO-60	1.3305E+03	1.3345E+03	1.3319E+03	
*PEAK FWHM CD-109	6.9450E-01	9.5230E-01	8.5136E-01	
*PEAK FWHM CS-137	1.3260E+00	1.5802E+00	1.4526E+00	
*PEAK FWHM CO-60	1.7823E+00	2.2419E+00	1.9693E+00	
*PEAK CENTROID AM-241	1.1500E+02	1.2300E+02	1.1910E+02	
*PEAK ENERGY AM-241	5.7500E+01	6.1500E+01	5.9577E+01	
*PEAK FWHM AM-241	5.0000E-01	2.0000E+00	7.5587E-01	

Flags: "*" means the out-of-range test is parameter-dependent

Approved by: MR Approval Date: 12 / 17 / 07

RUNLOGS

Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
198689011	SAMPLE	MJH1	GAM17		12-DEC-2007 12:21	708130	**DONE**	CAN	07-FEB-2007
198689012	SAMPLE	MJH1	GAM06		12-DEC-2007 12:37	708130	**DONE**	CAN	21-FEB-2007
198689013	SAMPLE	MJH1	GAM13		12-DEC-2007 12:38	708130	**DONE**	CAN	03-JUL-2007
198689014	SAMPLE	MJH1	GAM20		12-DEC-2007 12:38	708130	**DONE**	CAN	10-SEP-2007
198701001	SAMPLE	MJH1	GAM21		12-DEC-2007 12:39	708130	**DONE**	CAN	03-JUL-2007
198701002	SAMPLE	MJH1	GAM23		12-DEC-2007 12:39	708130	**DONE**	CAN	23-MAY-2007
198701003	SAMPLE	MJH1	GAM06		13-DEC-2007 05:36	708130	**DONE**	CAN	21-FEB-2007
198701004	SAMPLE	MJH1	GAM17		13-DEC-2007 05:36	708130	**DONE**	CAN	07-FEB-2007
198701005	SAMPLE	MJH1	GAM23		13-DEC-2007 05:37	708130	**DONE**	CAN	23-MAY-2007
198701006	SAMPLE	MJH1	GAM03		13-DEC-2007 05:38	708130	**DONE**	CAN	29-MAR-2007
198701007	SAMPLE	MJH1	GAM20		13-DEC-2007 06:55	708130	**DONE**	CAN	10-SEP-2007
198701008	SAMPLE	MJH1	GAM11		13-DEC-2007 07:36	708130	**DONE**	CAN	02-OCT-2007
198701009	SAMPLE	MJH1	GAM12		13-DEC-2007 07:37	708130	**DONE**	CAN	22-FEB-2007
198701010	SAMPLE	MJH1	GAM14		13-DEC-2007 07:37	708130	**DONE**	CAN	07-MAR-2007
198701011	SAMPLE	MJH1	GAM02		13-DEC-2007 07:39	708130	**DONE**	CAN	23-OCT-2007
198701012	SAMPLE	MJH1	GAM19		13-DEC-2007 08:29	708130	**DONE**	CAN	07-MAR-2007
198701013	SAMPLE	MJH1	GAM22		13-DEC-2007 08:56	708130	**DONE**	CAN	06-MAR-2007
198701014	SAMPLE	MJH1	GAM05		13-DEC-2007 09:03	708130	**DONE**	CAN	31-MAY-2007
198701015	SAMPLE	MJH1	GAM20		13-DEC-2007 10:59	708130	**DONE**	CAN	10-SEP-2007
198701016	SAMPLE	MJH1	GAM16		13-DEC-2007 11:15	708130	**DONE**	CAN	02-OCT-2007
1201473840	MB	MJH1	GAM21		13-DEC-2007 12:52	708130	**DONE**	CAN	03-JUL-2007
1201473841	DUP	MJH1	GAM23		13-DEC-2007 12:53	708130	**DONE**	CAN	23-MAY-2007
1201473842	LCS	MJH1	GAM05		14-DEC-2007 04:50	708130	**DONE**	CAN	31-MAY-2007

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
198701017	SAMPLE	MJH1	GAM05		13-DEC-2007 13:31	708131	**DONE**	CAN	31-MAY-2007
198701018	SAMPLE	MJH1	GAMAN		13-DEC-2007 16:42	708131	**DONE**	CAN	28-MAR-2007
198701020	SAMPLE	MJH1	GAM05		13-DEC-2007 18:35	708131	**DONE**	CAN	31-MAY-2007
198701021	SAMPLE	MJH1	GAM21		13-DEC-2007 18:36	708131	**DONE**	CAN	03-JUL-2007
198701022	SAMPLE	MJH1	GAM22		13-DEC-2007 18:36	708131	**DONE**	CAN	06-MAR-2007
198701023	SAMPLE	MJH1	GAM23		13-DEC-2007 18:37	708131	**DONE**	CAN	23-MAY-2007
198701019	SAMPLE	MJH1	GAMAN		14-DEC-2007 01:07	708131	**DONE**	CAN	28-MAR-2007
198701024	SAMPLE	MJH1	GAM21		14-DEC-2007 05:10	708131	**DONE**	CAN	03-JUL-2007
198701025	SAMPLE	MJH1	GAM22		14-DEC-2007 05:11	708131	**DONE**	CAN	06-MAR-2007
198701026	SAMPLE	MJH1	GAM23		14-DEC-2007 05:12	708131	**DONE**	CAN	23-MAY-2007
198701027	SAMPLE	MJH1	GAM05		14-DEC-2007 06:38	708131	**DONE**	CAN	31-MAY-2007
198701028	SAMPLE	MJH1	GAM07		14-DEC-2007 06:41	708131	**DONE**	CAN	30-OCT-2007
198701029	SAMPLE	MJH1	GAM12		14-DEC-2007 06:43	708131	**DONE**	CAN	22-FEB-2007
198701030	SAMPLE	MJH1	GAM19		14-DEC-2007 07:31	708131	**DONE**	CAN	07-MAR-2007
198701031	SAMPLE	MJH1	GAM20		14-DEC-2007 07:32	708131	**DONE**	CAN	10-SEP-2007
198701032	SAMPLE	MJH1	GAM06		14-DEC-2007 08:11	708131	**DONE**	CAN	21-FEB-2007
198701033	SAMPLE	MJH1	GAM17		14-DEC-2007 08:19	708131	**DONE**	CAN	07-FEB-2007
198701034	SAMPLE	MJH1	GAM14		14-DEC-2007 08:33	708131	**DONE**	CAN	07-MAR-2007
198701035	SAMPLE	MJH1	GAM16		14-DEC-2007 08:42	708131	**DONE**	CAN	02-OCT-2007
198701036	SAMPLE	MJH1	GAM21		14-DEC-2007 09:34	708131	**DONE**	CAN	03-JUL-2007
1201473843	MB	MJH1	GAM01		14-DEC-2007 10:21	708131	**DONE**	CAN	07-MAR-2007
1201473844	DUP	MJH1	GAM02		14-DEC-2007 10:21	708131	**DONE**	CAN	23-OCT-2007
1201473845	LCS	MJH1	GAM03		14-DEC-2007 10:22	708131	**DONE**	CAN	29-MAR-2007

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
198701039	SAMPLE	MJH1	GAM20		16-DEC-2007 16:47	708133	**DONE**	CAN	10-SEP-2007
198701040	SAMPLE	MJH1	GAM21		16-DEC-2007 16:47	708133	**DONE**	CAN	03-JUL-2007
198701053	SAMPLE	MJH1	GAM22		16-DEC-2007 16:48	708133	**DONE**	CAN	06-MAR-2007
198701037	SAMPLE	MJH1	GAM11		17-DEC-2007 11:03	708133	**DONE**	CAN	02-OCT-2007
198701038	SAMPLE	MJH1	GAM12		17-DEC-2007 11:03	708133	**DONE**	CAN	22-FEB-2007
198701041	SAMPLE	MJH1	GAM21		17-DEC-2007 11:13	708133	**DONE**	CAN	03-JUL-2007
198701042	SAMPLE	MJH1	GAM23		17-DEC-2007 11:13	708133	**DONE**	CAN	23-MAY-2007
198701043	SAMPLE	MJH1	GAM17		17-DEC-2007 11:24	708133	**DONE**	CAN	07-FEB-2007
198701052	SAMPLE	MJH1	GAM01		17-DEC-2007 12:02	708133	**DONE**	CAN	07-MAR-2007
198701044	SAMPLE	MJH1	GAM02		17-DEC-2007 12:02	708133	**DONE**	CAN	23-OCT-2007
198701045	SAMPLE	MJH1	GAM06		17-DEC-2007 12:03	708133	**DONE**	CAN	21-FEB-2007
198701046	SAMPLE	MJH1	GAM07		17-DEC-2007 12:03	708133	**DONE**	CAN	30-OCT-2007
198701047	SAMPLE	MJH1	GAM22		17-DEC-2007 12:04	708133	**DONE**	CAN	06-MAR-2007
198701048	SAMPLE	MJH1	GAM14		17-DEC-2007 12:04	708133	**DONE**	CAN	07-MAR-2007
198701049	SAMPLE	MJH1	GAM16		17-DEC-2007 12:05	708133	**DONE**	CAN	02-OCT-2007
198701050	SAMPLE	MJH1	GAM19		17-DEC-2007 12:06	708133	**DONE**	CAN	07-MAR-2007
198701051	SAMPLE	MJH1	GAM20		17-DEC-2007 12:07	708133	**DONE**	CAN	10-SEP-2007
198701054	SAMPLE	MJH1	GAM04		17-DEC-2007 12:36	708133	**DONE**	CAN	07-MAR-2007
198701055	SAMPLE	MJH1	GAM05		17-DEC-2007 14:29	708133	**DONE**	CAN	31-MAY-2007
198701056	SAMPLE	MJH1	GAM13		17-DEC-2007 14:29	708133	**DONE**	CAN	03-JUL-2007
1201473846	MB	MJH1	GAM17		17-DEC-2007 14:30	708133	**DONE**	CAN	07-FEB-2007
1201473847	DUP	MJH1	GAM21		17-DEC-2007 14:31	708133	**DONE**	CAN	03-JUL-2007
1201473848	LCS	MJH1	GAM11		17-DEC-2007 15:07	708133	**DONE**	CAN	02-OCT-2007

Version 1.1 9/5/05
GEL Laboratories LLC

Analytical Report For 710183

for

SC&A, Inc.

Project Manager : Cynthia White

Project Name : Cabrera-Schofield CZ

December 14, 2007

GPL

Laboratories

GPL Laboratories, LLLP Certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted.

Reviewed by, Project Manager	Approved by, Laboratory Director

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GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2322-ST
GPL ID: 710183-001-001-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2020
Prep Time: 07:00
Prep Batch: 101389

Analytical Method: SW6010C
Date Analyzed: 11/19/2007
Time Analyzed: 04:39
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	23.4	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2323-ST
GPL ID: 710183-002-002-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2020
Prep Time: 07:00
Prep Batch: 101389

Analytical Method: SW6010C
Date Analyzed: 11/19/2007
Time Analyzed: 04:48
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	67.0	8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2324-ST
GPL ID: 710183-003-003-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2020
Prep Time: 07:00
Prep Batch: 101389

Analytical Method: SW6010C
Date Analyzed: 11/19/2007
Time Analyzed: 04:56
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	34.8	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2325-ST
GPL ID: 710183-004-004-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2020
Prep Time: 07:00
Prep Batch: 101389

Analytical Method: SW6010C
Date Analyzed: 11/20/2007
Time Analyzed: 00:35
Analysis Batch: 108728

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	192	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2326-ST
GPL ID: 710183-005-005-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2020
Prep Time: 07:00
Prep Batch: 101389

Analytical Method: SW6010C
Date Analyzed: 11/20/2007
Time Analyzed: 00:43
Analysis Batch: 108728

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	36.5	8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2327-ST
GPL ID: 710183-006-006-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2020
Prep Time: 07:00
Prep Batch: 101389

Analytical Method: SW6010C
Date Analyzed: 11/20/2007
Time Analyzed: 00:52
Analysis Batch: 108728

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	23.8	8.1	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2328-ST
GPL ID: 710183-007-007-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 17:43
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	73.6	8.4	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2329-ST
GPL ID: 710183-008-008-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 17:59
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	43.3	8.2	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2330-ST
GPL ID: 710183-009-009-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:03
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	48.9	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2331-ST
GPL ID: 710183-010-010-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:20
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	71.4	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2332-ST
GPL ID: 710183-011-011-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:23
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	89.0	8.1	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2333-ST
GPL ID: 710183-012-012-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:26
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	23.2	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2334-ST
GPL ID: 710183-013-013-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:29
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	121	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2335-ST
GPL ID: 710183-014-014-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:33
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	107	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2336-ST
GPL ID: 710183-015-015-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:36
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	62.8	7.8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2337-ST
GPL ID: 710183-016-016-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:40
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	356	8.1	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2338-ST
GPL ID: 710183-017-017-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:43
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	40.4	8.1	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2339-ST
GPL ID: 710183-018-018-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:46
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	100	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2340-ST
GPL ID: 710183-019-019-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:50
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	52.8	8.6	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2341-ST
GPL ID: 710183-020-020-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 18:59
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	344	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2342-ST
GPL ID: 710183-021-021-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:03
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	91.3	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2343-ST
GPL ID: 710183-022-022-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:06
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	30.8	8.6	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2344-ST
GPL ID: 710183-023-023-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:09
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	80.1	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2345-ST
GPL ID: 710183-024-024-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:13
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	95.1	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2346-ST
GPL ID: 710183-025-025-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:16
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	35.8	7.9	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2347-ST
GPL ID: 710183-026-026-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/29/2007
Prep Time: 00:00
Prep Batch: 101469

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:19
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	58.2	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2348-ST
GPL ID: 710183-027-027-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:29
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	50.7	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2349-ST
GPL ID: 710183-028-028-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:53
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	17.8	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2322-SD
GPL ID: 710183-029-029-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 19:56
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	13.4	8.8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2323-SD
GPL ID: 710183-030-030-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:00
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	24.7	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2324-SD
GPL ID: 710183-031-031-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:03
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	16.1	7.9	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2325-SD
GPL ID: 710183-032-032-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:07
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	29.5	8.1	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2326-SD
GPL ID: 710183-033-033-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:10
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	16.6	8.8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2327-SD
GPL ID: 710183-034-034-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:20
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	22.8	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2328-SD
GPL ID: 710183-035-035-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:23
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	17.7	8.4	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2329-SD
GPL ID: 710183-036-036-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:27
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	23.3	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2330-SD
GPL ID: 710183-037-037-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:30
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	23.3	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2331-SD
GPL ID: 710183-038-038-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:33
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	29.4	8.8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2332-SD
GPL ID: 710183-039-039-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:37
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	159	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2333-SD
GPL ID: 710183-040-040-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:40
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	13.5	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2334-SD
GPL ID: 710183-041-041-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:43
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	26.2	7.9	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2335-SD
GPL ID: 710183-042-042-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:47
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	22.4	8.4	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2336-SD
GPL ID: 710183-043-043-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 20:50
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	16.5	8.3	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2337-SD
GPL ID: 710183-044-044-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 21:00
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	20.4	7.7	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2338-SD
GPL ID: 710183-045-045-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 21:03
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	12.0	8.8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2339-SD
GPL ID: 710183-046-046-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 12:00
Prep Batch: 101683

Analytical Method: SW6010C
Date Analyzed: 12/03/2007
Time Analyzed: 21:07
Analysis Batch: 108726

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	21.9	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2340-SD
GPL ID: 710183-047-047-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 20:26
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	18.5	8.7	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2341-SD
GPL ID: 710183-048-048-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 21:27
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	57.1	8.6	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2342-SD
GPL ID: 710183-049-049-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 21:35
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	22.3	7.9	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2343-SD
GPL ID: 710183-050-050-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 21:44
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	14.0	8.8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2344-SD
GPL ID: 710183-051-051-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 21:52
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	19.0	8.1	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2345-SD
GPL ID: 710183-052-052-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 22:00
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	16.4	8.2	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2346-SD
GPL ID: 710183-053-053-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 22:09
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	8.8	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2347-SD
GPL ID: 710183-054-054-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 22:37
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	26.8	8	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2348-SD
GPL ID: 710183-055-055-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 22:45
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	8.9	8.5	mg/kg	D	10

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID: SB-CZ-SS-2349-SD
GPL ID: 710183-056-056-1/1
Matrix: SOIL
Date Collected: 09/28/2007
Date Received: 10/25/2007

Prep Method: SW3050B
Prep Date: 10/30/2007
Prep Time: 15:28
Prep Batch: 101388

Analytical Method: SW6010C
Date Analyzed: 11/18/2007
Time Analyzed: 22:53
Analysis Batch: 108727

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Lead	6.4	8	mg/kg	JD	10

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : Cabrera-Schofield CZ

Date Printed December 14, 2007

GPL ID	Client ID
710183-029-029-1/1	SB-CZ-SS-2322-SD
710183-001-001-1/1	SB-CZ-SS-2322-ST
710183-030-030-1/1	SB-CZ-SS-2323-SD
710183-002-002-1/1	SB-CZ-SS-2323-ST
710183-031-031-1/1	SB-CZ-SS-2324-SD
710183-003-003-1/1	SB-CZ-SS-2324-ST
710183-032-032-1/1	SB-CZ-SS-2325-SD
710183-004-004-1/1	SB-CZ-SS-2325-ST
710183-033-033-1/1	SB-CZ-SS-2326-SD
710183-005-005-1/1	SB-CZ-SS-2326-ST
710183-034-034-1/1	SB-CZ-SS-2327-SD
710183-006-006-1/1	SB-CZ-SS-2327-ST
710183-035-035-1/1	SB-CZ-SS-2328-SD
710183-007-007-1/1	SB-CZ-SS-2328-ST
710183-036-036-1/1	SB-CZ-SS-2329-SD
710183-008-008-1/1	SB-CZ-SS-2329-ST
710183-037-037-1/1	SB-CZ-SS-2330-SD
710183-009-009-1/1	SB-CZ-SS-2330-ST
710183-038-038-1/1	SB-CZ-SS-2331-SD
710183-010-010-1/1	SB-CZ-SS-2331-ST
710183-039-039-1/1	SB-CZ-SS-2332-SD
710183-011-011-1/1	SB-CZ-SS-2332-ST
710183-040-040-1/1	SB-CZ-SS-2333-SD
710183-012-012-1/1	SB-CZ-SS-2333-ST
710183-041-041-1/1	SB-CZ-SS-2334-SD
710183-013-013-1/1	SB-CZ-SS-2334-ST
710183-042-042-1/1	SB-CZ-SS-2335-SD
710183-014-014-1/1	SB-CZ-SS-2335-ST
710183-043-043-1/1	SB-CZ-SS-2336-SD
710183-015-015-1/1	SB-CZ-SS-2336-ST
710183-044-044-1/1	SB-CZ-SS-2337-SD
710183-016-016-1/1	SB-CZ-SS-2337-ST
710183-045-045-1/1	SB-CZ-SS-2338-SD
710183-017-017-1/1	SB-CZ-SS-2338-ST
710183-046-046-1/1	SB-CZ-SS-2339-SD
710183-018-018-1/1	SB-CZ-SS-2339-ST
710183-047-047-1/1	SB-CZ-SS-2340-SD
710183-019-019-1/1	SB-CZ-SS-2340-ST
710183-048-048-1/1	SB-CZ-SS-2341-SD
710183-020-020-1/1	SB-CZ-SS-2341-ST
710183-049-049-1/1	SB-CZ-SS-2342-SD
710183-021-021-1/1	SB-CZ-SS-2342-ST
710183-050-050-1/1	SB-CZ-SS-2343-SD
710183-022-022-1/1	SB-CZ-SS-2343-ST
710183-051-051-1/1	SB-CZ-SS-2344-SD
710183-023-023-1/1	SB-CZ-SS-2344-ST
710183-052-052-1/1	SB-CZ-SS-2345-SD

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : Cabrera-Schofield CZ

Date Printed December 14, 2007

GPL ID	Client ID
710183-024-024-1/1	SB-CZ-SS-2345-ST
710183-053-053-1/1	SB-CZ-SS-2346-SD
710183-025-025-1/1	SB-CZ-SS-2346-ST
710183-054-054-1/1	SB-CZ-SS-2347-SD
710183-026-026-1/1	SB-CZ-SS-2347-ST
710183-055-055-1/1	SB-CZ-SS-2348-SD
710183-027-027-1/1	SB-CZ-SS-2348-ST
710183-056-056-1/1	SB-CZ-SS-2349-SD
710183-028-028-1/1	SB-CZ-SS-2349-ST

TRACE METALS

GPL Laboratories

USEPA - CLP

COVER PAGE

Lab Name: GPL LABORATORIES, LLLP Contract:

Lab Code: Case No.: NRAS No.: SDG No.: 710183

SOW No.: SW6010C

EPA Sample No.	Lab Sample ID
SB-CZ-SS-2320-ST	S 710166-039-039-1/1
SB-CZ-SS-2320-STMS	SP710166-039-039-1/1
SB-CZ-SS-2320-STMSD	SD710166-039-039-1/1
SB-CZ-SS-2322-SD	S 710183-029-029-1/1
SB-CZ-SS-2322-ST	S 710183-001-001-1/1
SB-CZ-SS-2323-SD	S 710183-030-030-1/1
SB-CZ-SS-2323-ST	S 710183-002-002-1/1
SB-CZ-SS-2324-SD	S 710183-031-031-1/1
SB-CZ-SS-2324-ST	S 710183-003-003-1/1
SB-CZ-SS-2325-SD	S 710183-032-032-1/1
SB-CZ-SS-2325-ST	S 710183-004-004-1/1
SB-CZ-SS-2326-SD	S 710183-033-033-1/1
SB-CZ-SS-2326-ST	S 710183-005-005-1/1
SB-CZ-SS-2327-SD	S 710183-034-034-1/1
SB-CZ-SS-2327-ST	S 710183-006-006-1/1
SB-CZ-SS-2328-SD	S 710183-035-035-1/1
SB-CZ-SS-2328-ST	S 710183-007-007-1/1
SB-CZ-SS-2328-ST MS	SP710183-007-007-1/1
SB-CZ-SS-2328-ST MSD	SD710183-007-007-1/1
SB-CZ-SS-2329-SD	S 710183-036-036-1/1
SB-CZ-SS-2329-ST	S 710183-008-008-1/1
SB-CZ-SS-2330-SD	S 710183-037-037-1/1
SB-CZ-SS-2330-ST	S 710183-009-009-1/1
SB-CZ-SS-2331-SD	S 710183-038-038-1/1
SB-CZ-SS-2331-ST	S 710183-010-010-1/1
SB-CZ-SS-2332-SD	S 710183-039-039-1/1
SB-CZ-SS-2332-ST	S 710183-011-011-1/1
SB-CZ-SS-2333-SD	S 710183-040-040-1/1
SB-CZ-SS-2333-ST	S 710183-012-012-1/1
SB-CZ-SS-2334-SD	S 710183-041-041-1/1
SB-CZ-SS-2334-ST	S 710183-013-013-1/1
SB-CZ-SS-2335-SD	S 710183-042-042-1/1
SB-CZ-SS-2335-ST	S 710183-014-014-1/1
SB-CZ-SS-2336-SD	S 710183-043-043-1/1
SB-CZ-SS-2336-ST	S 710183-015-015-1/1

EPA Sample No.	Lab Sample ID
SB-CZ-SS-2337-SD	S 710183-044-044-1/1
SB-CZ-SS-2337-ST	S 710183-016-016-1/1
SB-CZ-SS-2338-SD	S 710183-045-045-1/1
SB-CZ-SS-2338-ST	S 710183-017-017-1/1
SB-CZ-SS-2339-SD	S 710183-046-046-1/1
SB-CZ-SS-2339-ST	S 710183-018-018-1/1
SB-CZ-SS-2340-SD	S 710183-047-047-1/1
SB-CZ-SS-2340-SD MS	SP710183-047-047-1/1
SB-CZ-SS-2340-SD MSD	SD710183-047-047-1/1
SB-CZ-SS-2340-ST	S 710183-019-019-1/1
SB-CZ-SS-2341-SD	S 710183-048-048-1/1
SB-CZ-SS-2341-ST	S 710183-020-020-1/1
SB-CZ-SS-2342-SD	S 710183-049-049-1/1
SB-CZ-SS-2342-ST	S 710183-021-021-1/1
SB-CZ-SS-2343-SD	S 710183-050-050-1/1
SB-CZ-SS-2343-ST	S 710183-022-022-1/1
SB-CZ-SS-2344-SD	S 710183-051-051-1/1
SB-CZ-SS-2344-ST	S 710183-023-023-1/1
SB-CZ-SS-2345-SD	S 710183-052-052-1/1
SB-CZ-SS-2345-ST	S 710183-024-024-1/1
SB-CZ-SS-2346-SD	S 710183-053-053-1/1
SB-CZ-SS-2346-ST	S 710183-025-025-1/1
SB-CZ-SS-2347-SD	S 710183-054-054-1/1
SB-CZ-SS-2347-ST	S 710183-026-026-1/1
SB-CZ-SS-2348-SD	S 710183-055-055-1/1
SB-CZ-SS-2348-ST	S 710183-027-027-1/1
SB-CZ-SS-2348-ST MS	SP710183-027-027-1/1
SB-CZ-SS-2348-ST MSD	SD710183-027-027-1/1
SB-CZ-SS-2349-SD	S 710183-056-056-1/1
SB-CZ-SS-2349-ST	S 710183-028-028-1/1

		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

EPA Sample No.	Lab Sample ID

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:	12/13/2007	Title:	Asst Lab Director

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-001-001-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2322-ST	Prep Batch:	101389
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.5	23.4	D	10	11/19/07 4:39

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-002-002-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2323-ST	Prep Batch:	101389
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.0	67.0	D	10	11/19/07 4:48

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-003-003-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2324-ST	Prep Batch:	101389
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.5	34.8	D	10	11/19/07 4:56

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-004-004-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2325-ST	Prep Batch:	101389
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.3	192	D	10	11/20/07 0:35

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-005-005-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2326-ST	Prep Batch:	101389
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.0	36.5	D	10	11/20/07 0:43

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-006-006-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2327-ST	Prep Batch:	101389
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.1	23.8	D	10	11/20/07 0:52

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-007-007-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2328-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	73.6	D	10	12/03/07 17:43

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-008-008-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2329-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.82	8.2	43.3	D	10	12/03/07 17:59

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-009-009-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2330-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	48.9	D	10	12/03/07 18:03

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-010-010-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2331-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	71.4	D	10	12/03/07 18:20

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-011-011-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2332-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	89.0	D	10	12/03/07 18:23

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-012-012-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2333-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	23.2	D	10	12/03/07 18:26

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-013-013-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2334-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	121	D	10	12/03/07 18:29

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-014-014-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2335-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	107	D	10	12/03/07 18:33

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-015-015-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2336-ST	Prep Batch:	101469
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	0.78	7.8	62.8	D	10	12/03/07 18:36

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-016-016-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2337-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	356	D	10	12/03/07 18:40

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-017-017-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2338-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	40.4	D	10	12/03/07 18:43

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-018-018-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2339-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	100	D	10	12/03/07 18:46

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-019-019-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2340-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	52.8	D	10	12/03/07 18:50

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-020-020-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2341-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	344	D	10	12/03/07 18:59

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-021-021-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2342-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	91.3	D	10	12/03/07 19:03

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-022-022-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2343-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	30.8	D	10	12/03/07 19:06

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-023-023-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2344-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	80.1	D	10	12/03/07 19:09

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-024-024-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2345-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	95.1	D	10	12/03/07 19:13

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-025-025-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2346-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.79	7.9	35.8	D	10	12/03/07 19:16

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-026-026-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2347-ST	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	58.2	D	10	12/03/07 19:19

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-027-027-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2348-ST	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	50.7	D	10	12/03/07 19:29

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-028-028-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2349-ST	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	17.8	D	10	12/03/07 19:53

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-029-029-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2322-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.88	8.8	13.4	D	10	12/03/07 19:56

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-030-030-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2323-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	24.7	D	10	12/03/07 20:00

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-031-031-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2324-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.79	7.9	16.1	D	10	12/03/07 20:03

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-032-032-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2325-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	29.5	D	10	12/03/07 20:07

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-033-033-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2326-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.88	8.8	16.6	D	10	12/03/07 20:10

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-034-034-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2327-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	22.8	D	10	12/03/07 20:20

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-035-035-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2328-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	17.7	D	10	12/03/07 20:23

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-036-036-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2329-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	23.3	D	10	12/03/07 20:27

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-037-037-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2330-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	23.3	D	10	12/03/07 20:30

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

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-038-038-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2331-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.88	8.8	29.4	D	10	12/03/07 20:33

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-039-039-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2332-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	159	D	10	12/03/07 20:37

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-040-040-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2333-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	13.5	D	10	12/03/07 20:40

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-041-041-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2334-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.79	7.9	26.2	D	10	12/03/07 20:43

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-042-042-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2335-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	22.4	D	10	12/03/07 20:47

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-043-043-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2336-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	16.5	D	10	12/03/07 20:50

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-044-044-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2337-SD	Prep Batch:	101683
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	0.77	7.7	20.4	D	10	12/03/07 21:00

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-045-045-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2338-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.88	8.8	12.0	D	10	12/03/07 21:03

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-046-046-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2339-SD	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	21.9	D	10	12/03/07 21:07

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-047-047-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2340-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.7	18.5	D	10	11/18/07 20:26

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-048-048-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2341-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.6	57.1	D	10	11/18/07 21:27

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-049-049-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2342-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	7.9	22.3	D	10	11/18/07 21:35

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-050-050-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2343-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.8	14.0	D	10	11/18/07 21:44

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-051-051-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2344-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.1	19.0	D	10	11/18/07 21:52

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-052-052-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2345-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.2	16.4	D	10	11/18/07 22:00

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-053-053-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2346-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.5	8.8	D	10	11/18/07 22:09

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-054-054-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2347-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.0	26.8	D	10	11/18/07 22:37

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-055-055-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2348-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.5	8.9	D	10	11/18/07 22:45

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	S 710183-056-056-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2349-SD	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.0	6.4	JD	10	11/18/07 22:53

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:	710183	Matrix:	Soil
Lab Sample ID:	BLK101388	Percent Moisture:	0.0
Client Sample ID:	NA	Prep Batch:	101388
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.16	1.0	0.16	U	1	11/18/07 20:09

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Preparation Blank Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	BLK101389	Percent Moisture:	0.0
Client Sample ID:	NA	Prep Batch:	101389
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.16	1.0	0.16	U	1	11/19/07 0:48

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Preparation Blank Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	BLK101469	Percent Moisture:	0.0
Client Sample ID:	NA	Prep Batch:	101469
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.10	1.0	0.10	U	1	12/03/07 17:29

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Preparation Blank Results

Project:	710183	Matrix:	Soil
Lab Sample ID:	BLK101683	Percent Moisture:	0.0
Client Sample ID:	NA	Prep Batch:	101683
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.10	1.0	0.10	U	1	12/03/07 19:23

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

GPL Laboratories, LLLP

Initial Calibration Verification

Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:	AB.ST.	Standard ID:	

Analyte	True	ICV 12/3/2007 1:02:12 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	400.0	422.36	106						

GPL Laboratories, LLLP

Initial Calibration Verification

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:	ABSOLUTE	Standard ID:	

Analyte	True	IVICV 11/18/2007 5:24:00 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	400.0	428.93	107						

GPL Laboratories, LLLP

Initial Calibration Verification

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:	ABSOLUTE	Standard ID:	

Analyte	True	IVICV 11/19/2007 12:21:00 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	400.0	421.71	105						

GPL Laboratories, LLLP

Continuing Calibration Verification

Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	True	CCV1 12/3/2007 1:08:45 PM		CCV2 12/3/2007 1:32:29 PM		CCV3 12/3/2007 2:12:19 PM		CCV4 12/3/2007 2:52:22 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	490.49	98	495.19	99	495.88	99	511.62	102

GPL Laboratories, LLLP

Continuing Calibration Verification

Project: 710183

Units: ug/L

Standard Source:

Instrument: iTEVA-Soil

Data File Name: 071203.txt

Standard ID:

Analyte	True	CCV5 12/3/2007 3:32:30 PM		CCV6 12/3/2007 4:12:18 PM		CCV7 12/3/2007 4:52:37 PM		CCV8 12/3/2007 5:32:47 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	507.46	101	512.21	102	515.81	103	516.35	103

GPL Laboratories, LLLP

Continuing Calibration Verification

Project: 710183

Units: ug/L

Standard Source:

Instrument: ITEVA-Soil

Data File Name: 071203.txt

Standard ID:

Analyte	True	CCV9 12/3/2007 6:13:14 PM		CCV10 12/3/2007 6:53:20 PM		CCV11 12/3/2007 7:33:23 PM		CCV12 12/3/2007 8:13:46 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	523.69	105	1.00		518.11	104	517.71	104

GPL Laboratories, LLLP

Continuing Calibration Verification

Project: 710183

Units: ug/L

Standard Source:

Instrument: ITEVA-Soil

Data File Name: 071203.txt

Standard ID:

Analyte	True	CCV13 12/3/2007 8:53:51 PM		CCV14 12/3/2007 9:33:52 PM					
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	517.23	103	527.11	105				

GPL Laboratories, LLLP

Continuing Calibration Verification

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV1 11/18/2007 5:41:00 PM		CVCCV2 11/18/2007 6:48:00 PM		CVCCV3 11/18/2007 8:37:00 PM		CVCCV4 11/18/2007 10:20:00 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	508.58	102	534.28	107	512.08	102	519.61	104

GPL Laboratories, LLLP

Continuing Calibration Verification

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV5 11/19/2007 12:03:00 AM		CVCCV6 11/19/2007 1:41:00 AM		CVCCV7 11/19/2007 3:24:00 AM		CVCCV8 11/19/2007 5:07:00 AM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	527.04	105	520.12	104	489.51	98	527.39	105

GPL Laboratories, LLLP

Continuing Calibration Verification

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV1 11/19/2007 12:38:00 PM		CVCCV2 11/19/2007 1:55:00 PM		CVCCV3 11/19/2007 3:55:00 PM		CVCCV4 11/19/2007 4:28:00 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	505.85	101	515.69	103	528.07	106	525.11	105

GPL Laboratories, LLLP

Continuing Calibration Verification

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV5 11/19/2007 6:16:00 PM		CVCCV6 11/19/2007 7:53:00 PM		CVCCV7 11/19/2007 9:37:00 PM		CVCCV8 11/19/2007 11:20:00 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	525.41	105	513.90	103	512.46	102	503.74	101

GPL Laboratories, LLLP

Continuing Calibration Verification

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV9 11/20/2007 1:03:00 AM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	464.22	93						

GPL Laboratories, LLLP

Low Level Check Standard

Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	True	PQL 12/3/2007 1:15:32 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	10.0	10.18	102						

GPL Laboratories, LLLP

Low Level Check Standard

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	REPORT LMT 11/18/2007 6:00:00 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	10.0	9.81	98						

GPL Laboratories, LLLP

Low Level Check Standard

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	REPORT LMT 11/19/2007 1:07:00 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	10.0	9.79	98						

GPL Laboratories, LLLP

Initial Calibration Blanks

Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	ICB 12/3/2007 1:05:30 PM							
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U						

GPL Laboratories, LLLP

Initial Calibration Blanks

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BIICB 11/18/2007 5:32:00 PM							
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U						

GPL Laboratories, LLLP

Initial Calibration Blanks

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BIICB 11/19/2007 12:29:00 PM							
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U						

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB1 12/3/2007 1:12:14 PM		CCB2 12/3/2007 1:35:58 PM		CCB3 12/3/2007 2:15:48 PM		CCB4 12/3/2007 2:55:52 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U	1.00	U	1.00	U	1.00	U

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB5 12/3/2007 3:36:00 PM		CCB6 12/3/2007 4:15:47 PM		CCB7 12/3/2007 4:56:06 PM		CCB8 12/3/2007 5:36:16 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U	1.00	U	1.06	J	1.00	U

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB9 12/3/2007 6:16:43 PM		CCB10 12/3/2007 6:56:40 PM		CCB11 12/3/2007 7:36:52 PM		CCB12 12/3/2007 8:17:14 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U	1.00	U	1.00	U	1.00	U

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB13 12/3/2007 8:57:19 PM		CCB14 12/3/2007 9:37:20 PM					
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.26	J	1.00	U				

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB1 11/18/2007 5:49:00 PM		BCCCB2 11/18/2007 6:59:00 PM		BCCCB3 11/18/2007 8:45:00 PM		BCCCB4 11/18/2007 10:28:00 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U	1.60	U	1.60	U	1.60	U

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB5 11/19/2007 12:11:00 AM		BCCCB6 11/19/2007 1:49:00 AM		BCCCB7 11/19/2007 3:32:00 AM		BCCCB8 11/19/2007 5:15:00 AM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U	1.60	U	1.60	U	1.60	U

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB1 11/19/2007 12:46:00 PM		BCCCB2 11/19/2007 2:06:00 PM		BCCCB3 11/19/2007 4:03:00 PM		BCCCB4 11/19/2007 4:36:00 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U	1.60	U	1.60	U	1.60	U

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB5 11/19/2007 6:24:00 PM		BCCCB6 11/19/2007 8:02:00 PM		BCCCB7 11/19/2007 9:45:00 PM		BCCCB8 11/19/2007 11:28:00 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U	1.60	U	1.60	U	1.60	U

GPL Laboratories, LLLP

Continuing Calibration Blanks

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB9 11/20/2007 1:11:00 AM							
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U						

GPL Laboratories, LLLP

Interference Check Standards

Project:	710183	Instrument:	iTEVA
Units:	ug/L	Data File Name:	071203.txt
Standard Source:	H.P./AB.ST.	Standard ID:	

Analyte	RL	True		Initial Found				Final Found			
		Sol. A	Sol. B		%R	ICSAB 12/03/07 13:22	%R		%R		%R
Lead	10		50	2.4		46.7	93				

GPL Laboratories, LLLP

Interference Check Standards

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC
Standard Source:	H.P./ AB.ST.	Standard ID:	

Analyte	RL	True		Initial Found				Final Found			
		Sol. A	Sol. B	IAICSA 11/18/07 18:17	%R	IBICSAB 11/18/07 18:26	%R		%R		%R
Lead	10		50	-0.56		47.5	95				

GPL Laboratories, LLLP

Interference Check Standards

Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071119V.ARC
Standard Source:	H.P./ AB.ST.	Standard ID:	

Analyte	RL	True		Initial Found				Final Found			
		Sol. A	Sol. B	IAICSA 11/19/07 13:24	%R	IBICSAB 11/19/07 13:33	%R		%R		%R
Lead	10		50	-2.5		50.0	100				

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2320-STMS	Lab Sample ID:	SP710166-039-039-1/1
Project:	710183	Instrument:	V3050
Units:	mg/kg	Data File Name:	071118V.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 11/19/07 01:57	Sample Result 11/19/07 01:04	Spike Added	%R
Lead	176.45	89.65	83.33	104

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2328-ST MS	Lab Sample ID:	SP710183-007-007-1/1
Project:	710183	Instrument:	iTEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 12/03/07 17:46	Sample Result 12/03/07 17:43	Spike Added	%R
Lead	165.04	73.56	80.65	113

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2348-ST MS	Lab Sample ID:	SP710183-027-027-1/1
Project:	710183	Instrument:	ITEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 12/03/07 19:40		Sample Result 12/03/07 19:29		Spike Added	%R
Lead	139.07		50.65		80.00	111

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2340-SD MS	Lab Sample ID:	SP710183-047-047-1/1
Project:	710183	Instrument:	V3050
Units:	mg/kg	Data File Name:	071118V.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 11/18/07 20:54	Sample Result 11/18/07 20:26	Spike Added	%R
Lead	105.98	18.46	83.33	105

GPL Laboratories, LLLP

Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2320-STMSD MSD	Lab Sample ID:	SD710166-039-039-1/1
Project:	710183	Instrument:	V3050
Units:	mg/kg	Data File Name:	071118V.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 11/19/07 02:06	Sample Result 11/19/07 01:04	Spike Added	%R
Lead	178.00	89.65	80.65	110

GPL Laboratories, LLLP

Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2328-ST MSD	Lab Sample ID:	SD710183-007-007-1/1
Project:	710183	Instrument:	iTEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 12/03/07 17:49	Sample Result 12/03/07 17:43	Spike Added	%R
Lead	152.13	73.56	78.74	100

GPL Laboratories, LLLP

Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2348-ST MSD	Lab Sample ID:	SD710183-027-027-1/1
Project:	710183	Instrument:	ITEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 12/03/07 19:43	Sample Result 12/03/07 19:29	Spike Added	%R
Lead	120.70	50.65	78.13	90

GPL Laboratories, LLLP

Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2340-SD MSD	Lab Sample ID:	SD710183-047-047-1/1
Project:	710183	Instrument:	V3050
Units:	mg/kg	Data File Name:	071118V.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 11/18/07 21:02	Sample Result 11/18/07 20:26	Spike Added	%R
Lead	103.38	18.46	80.65	105

GPL Laboratories, LLLP

Duplicates

Client ID:	SB-CZ-SS-2320-STMSD MSD	Lab Sample ID:	SD710166-039-039-1/1
Project:	710183	Instrument:	V3050
Units:	mg/kg	Data File Name:	071118V.ARC

Analyte	Original Sample Results	Duplicate Sample Results	RPD	Control Limit	Q
Lead	176.45	178.00	1	20	D

GPL Laboratories, LLLP

Duplicates

Client ID:	SB-CZ-SS-2328-ST MSD	Lab Sample ID:	SD710183-007-007-1/1
Project:	710183	Instrument:	iTEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt

Analyte	Original Sample Results	Duplicate Sample Results	RPD	Control Limit	Q
Lead	165.04	152.13	8	20	D

GPL Laboratories, LLLP

Duplicates

Client ID:	SB-CZ-SS-2340-SD MSD	Lab Sample ID:	SD710183-047-047-1/1
Project:	710183	Instrument:	V3050
Units:	mg/kg	Data File Name:	071118V.ARC

Analyte	Original Sample Results		Duplicate Sample Results		RPD	Control Limit	Q
Lead	105.98		103.38		2	20	D

GPL Laboratories, LLLP

Duplicates

Client ID:	SB-CZ-SS-2348-ST MSD	Lab Sample ID:	SD710183-027-027-1/1
Project:	710183	Instrument:	iTEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt

Analyte	Original Sample Results	Duplicate Sample Results	RPD	Control Limit	Q
Lead	139.07	120.70	14	20	D

GPL Laboratories, LLLP

Laboratory Control Sample

Project:	710183	Lab Sample ID:	BKS101469
Units:	mg/kg	Instrument:	iTEVA-Soil
		Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 12/03/07 17:39	Spike Added	%R
Lead	106.54	100.00	107

GPL Laboratories, LLLP

Laboratory Control Sample

Project:	710183	Lab Sample ID:	BKS101683
Units:	mg/kg	Instrument:	iTEVA-Soil
		Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 12/03/07 19:26	Spike Added	%R
Lead	106.09	100.00	106

GPL Laboratories, LLLP

Laboratory Control Sample

Project:	710183	Lab Sample ID:	BKS101388
Units:	mg/kg	Instrument:	V3050
		Data File Name:	071118V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	Spiked Sample Result 11/18/07 20:17	Spike Added	%R
Lead	102.87	100.00	103

GPL Laboratories, LLLP

Laboratory Control Sample

Project:	710183	Lab Sample ID:	BKS101389
Units:	mg/kg	Instrument:	V3050
		Data File Name:	071118V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	Spiked Sample Result 11/19/07 00:56	Spike Added	%R
Lead	101.81	100.00	102

GPL Laboratories, LLLP

Serial Dilutions

Client ID:	SB-CZ-SS-2320-ST	Lab Sample ID:	SE710166-039-039-1/1
Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC

Analyte	Sample Result 11/19/07 01:04		Serial Dilution Result 11/19/07 02:22		Percent Difference	Flag
Lead	103.99		102.63		1	

GPL Laboratories, LLLP

Serial Dilutions

Client ID:	SB-CZ-SS-2328-ST	Lab Sample ID:	SE710183-007-007-1/1
Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt

Analyte	Sample Result 12/03/07 17:43		Serial Dilution Result 12/03/07 17:56		Percent Difference	Flag
Lead	87.54		88.60		1	

GPL Laboratories, LLLP

Serial Dilutions

Client ID:	SB-CZ-SS-2340-SD	Lab Sample ID:	SE710183-047-047-1/1
Project:	710183	Instrument:	V3050
Units:	ug/L	Data File Name:	071118V.ARC

Analyte	Sample Result 11/18/07 20:26		Serial Dilution Result 11/18/07 21:19		Percent Difference	Flag
Lead	21.23		17.80	J	16	

GPL Laboratories, LLLP

Serial Dilutions

Client ID:	SB-CZ-SS-2348-ST	Lab Sample ID:	SE710183-027-027-1/1
Project:	710183	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt

Analyte	Sample Result 12/03/07 19:29		Serial Dilution Result 12/03/07 19:50		Percent Difference	Flag
Lead	60.79		55.54		9	

GPL Laboratories, LLLP

Detection Limits

Project: 710183 Instrument: iTEVA

Units: ug/L

Analyte	Wavelength/Mass	Reporting Limit	Method Detection Limit	Date of MDL
Lead	220.353	10.0	1.0	11/14/07

GPL Laboratories, LLLP

Detection Limits

Project: 710183 Instrument: V3050

Units: ug/L

Analyte	Wavelength/Mass	Reporting Limit	Method Detection Limit	Date of MDL
Lead	220.353	10.0	1.6	12/22/06

GPL - Maryland Laboratory

Metals Data Reporting Form

Inter-Element Correction Factors VACUUM SDG: 710183

Instrument: ICPST **Date of IEC's:** 7/27/2007

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Cd(0.000003), Mn(0.000003), Pb(0.000329), Sn(-0.000012), Pb2(-0.000225)
Barium	493.409	Co(0.000079)
Chromium	267.716	As(-0.006931), Co(-0.000172), Sb(0.008954), Ti(0.000219)
Cobalt	228.616	B(0.00924), Fe(0.072657), Tl(0.003155)
Copper	324.753	Zn(0.000602)
Iron	271.441	Al(-0.000069), B(-0.000074), Ba(0.000004), Cd(0.000112), Cr(-0.00002), Cu(-0.000003), Mg(0.000187), Mn(-0.000107), Mo(-0.000008), Na(-0.001083), Pb(0.000072), Sb(0.000017), Se(0.00001), Sn(0.000011), Tl(-0.00004), V(0.000027), Zn(0.000083), Pb2(0.000051), Se2(-0.000247)
Magnesium	279.078	Fe(-0.000217)
Manganese	257.61	Ag(0.00003), Al(0.000222), Cr(0.000158), Mg(-0.000743), Mo(-0.00006), Pb(0.000075), Se(0.000306), Sn(-0.000093), Tl(-0.004333), Pb2(0.000090), Se2(0.000272)
Molybdenum	202.03	Al(0.010738), Cu(0.000355), Mn(-0.000276), Pb(-0.00048), Sb(-0.014276), V(-0.000815), Pb2(-0.000668)
Titanium	334.941	Be(-0.000161), Co(0.001989), Cr(-0.000018), Na(-0.011855), Pb(0.0002), Sn(0.000202), V(0.000692), Pb2(-0.000475)
Vanadium	292.402	Al(0.020047), Be(0.000416), Fe(0.007412), Tl(0.001774)
Zinc	206.2	Na(0.024688)

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Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☐	4	Fe	-0.000015	0.000000	No
			Mn	0.000084	0.000000	No
			Cu	0.000068	0.000000	No
			Ti	-0.000115	0.000000	No
Al 396.152 { 85}	☐	5	Mo	0.051689	0.000000	No
			Fe	-0.000009	0.000000	No
			Cu	0.007323	0.000000	No
			Ca	0.000144	0.000000	No
			Na	0.000079	0.000000	No
As 193.759 {474}	☐	8	Al	-0.000182	0.000000	No
			V	-0.004848	0.000000	No
			Fe	-0.000159	0.000000	No
			Mo	-0.000304	0.000000	No
			Ca	-0.000010	0.000000	No
			Cr	0.001489	0.000000	No
			Ti	-0.000159	0.000000	No
			Zn	-0.000199	0.000000	No
B 208.959 {461}	☐	8	Mo	0.040678	0.000000	No
			Zn	0.000094	0.000000	No
			Mn	0.000290	0.000000	No
			Fe	-0.000008	0.000000	No
			Cu	-0.000516	0.000000	No
			Cr	0.001056	0.000000	No
			Co	0.000360	0.000000	No
			Ti	0.000557	0.000000	No
Ba 455.403 { 74}	☐	2	Fe	-0.000008	0.000000	No
			Al	0.000003	0.000000	No
Be 313.042 {108}	☐	3	Ti	-0.000402	0.000000	No
			Mo	-0.000038	0.000000	No
			V	0.000959	0.000000	No
Ca 317.933 {106}	☐	1	Na	0.000256	0.000000	No
Cd 226.502 {449}	☐	1	Fe	0.000054	0.000000	No
Co 228.616 {447}	☐	4	Mo	-0.001136	0.000000	No
			Ti	0.001995	0.000000	No
			Fe	-0.000002	0.000000	No
			Mn	0.000069	0.000000	No
Cr 267.716 {126}	☒	6	Fe	-0.000006	0.000000	No
			Mn	0.000116	0.000000	No
			Al	0.000005	0.000000	No
			Cu	0.000075	0.000000	No
			Ca	0.000001	0.000000	No
			Co	0.000063	0.000000	No
Cu 219.958 {453}	☒	13	Al	0.000568	0.000000	No
			Ca	-0.000227	0.000000	No
			Na	-0.000238	0.000000	No
			Mg	-0.000439	0.000000	No
			B	-0.003834	0.000000	No
			Cr	-0.007088	0.000000	No
			Co	-0.011022	0.000000	No
			Mn	-0.004165	0.000000	No
			Mo	-0.011425	0.000000	No
			Ti	-0.011681	0.000000	No
			V	-0.010122	0.000000	No
			Zn	-0.011796	0.000000	No
			Fe	-0.000223	0.000000	No
Cu 221.810 {452}	☒	13	Al	-0.000147	0.000000	No
			Ca	-0.000148	0.000000	No
			Na	-0.000148	0.000000	No
			Mg	-0.000277	0.000000	No
			B	0.014899	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Cr	0.020542	0.000000	No
			Co	-0.005233	0.000000	No
			Mn	0.002165	0.000000	No
			Mo	-0.010463	0.000000	No
			Ti	-0.007247	0.000000	No
			V	-0.007106	0.000000	No
			Zn	-0.007367	0.000000	No
			Fe	-0.001067	0.000000	No
Cu 327.396 {103}	☒	13	Al	-0.000143	0.000000	No
			Ca	-0.000123	0.000000	No
			Na	-0.000138	0.000000	No
			Mg	-0.000249	0.000000	No
			B	0.012714	0.000000	No
			Cr	0.000995	0.000000	No
			Co	-0.006974	0.000000	No
			Mn	0.001006	0.000000	No
			Mo	-0.007649	0.000000	No
			Ti	-0.008111	0.000000	No
			V	-0.005533	0.000000	No
			Zn	-0.007110	0.000000	No
			Fe	-0.000017	0.000000	No
Fe 259.940 {130}	☒	5	Na	-0.000014	0.000000	No
			Mn	-0.001399	0.000000	No
			Mo	-0.000705	0.000000	No
			V	-0.000340	0.000000	No
			Zn	0.000310	0.000000	No
K 766.490 { 44}	☒	13	Cu	0.003618	0.000000	No
			Mg	0.000031	0.000000	No
			Fe	-0.000501	0.000000	No
			Mn	0.008244	0.000000	No
			Mo	-0.008795	0.000000	No
			Al	0.000271	0.000000	No
			B	0.008494	0.000000	No
			Co	0.005627	0.000000	No
			Ti	0.005118	0.000000	No
			V	-0.004687	0.000000	No
			Zn	0.002340	0.000000	No
			Cr	0.004371	0.000000	No
			Na	0.000003	0.000000	No
Mg 280.270 {120}	☒	11	Ca	-0.000042	0.000000	No
			Na	0.000045	0.000000	No
			B	-0.001335	0.000000	No
			Cr	-0.001430	0.000000	No
			Co	-0.001417	0.000000	No
			Mn	-0.001523	0.000000	No
			Mo	-0.001745	0.000000	No
			Ti	-0.001522	0.000000	No
			V	-0.000962	0.000000	No
			Zn	-0.001715	0.000000	No
			Fe	-0.000034	0.000000	No
Mg 285.213 {118}	☒	11	Ca	-0.000042	0.000000	No
			Na	0.000044	0.000000	No
			B	-0.001799	0.000000	No
			Cr	-0.001797	0.000000	No
			Co	-0.001949	0.000000	No
			Mn	-0.001953	0.000000	No
			Mo	-0.002286	0.000000	No
			Ti	-0.002038	0.000000	No
			V	-0.002423	0.000000	No
			Zn	-0.002295	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Fe	-0.000527	0.000000	No
Mn 257.610 {131}	☒	5	Mg	0.000024	0.000000	No
			Fe	-0.000014	0.000000	No
			Al	-0.000002	0.000000	No
			Cr	-0.000058	0.000000	No
			V	-0.000028	0.000000	No
Mo 202.030 {467}	☒	8	Fe	-0.000006	0.000000	No
			Mn	-0.000090	0.000000	No
			Al	-0.000001	0.000000	No
			Mg	-0.000002	0.000000	No
			Cr	0.000043	0.000000	No
			Ti	0.000030	0.000000	No
			V	-0.000131	0.000000	No
			Zn	-0.000254	0.000000	No
Na 589.592 { 57}	☒	4	Mg	0.000593	0.000000	No
			Cr	0.010584	0.000000	No
			Zn	0.005397	0.000000	No
			Fe	-0.000012	0.000000	No
Ni 231.604 {445}	☒	8	Fe	-0.000062	0.000000	No
			Mo	0.001560	0.000000	No
			Al	0.000002	0.000000	No
			Mg	0.000003	0.000000	No
			Cr	-0.000055	0.000000	No
			Co	0.000472	0.000000	No
			Mn	0.000095	0.000000	No
			Zn	0.000064	0.000000	No
Pb 220.353 {453}	☒	10	Al	0.000241	0.000000	No
			Cu	0.002348	0.000000	No
			Mg	0.000008	0.000000	No
			Mo	-0.001992	0.000000	No
			Fe	0.000027	0.000000	No
			Mn	0.000149	0.000000	No
			Cr	0.000109	0.000000	No
			Ca	-0.000013	0.000000	No
			Na	-0.000002	0.000000	No
			Zn	0.000108	0.000000	No
Sb 206.833 {463}	☒	9	Cr	0.017119	0.000000	No
			V	-0.001556	0.000000	No
			Fe	0.000034	0.000000	No
			Mn	0.000000	0.000000	No
			Mo	-0.005080	0.000000	No
			Ca	0.000003	0.000000	No
			Co	0.000139	0.000000	No
			Ti	0.000447	0.000000	No
			Zn	0.000099	0.000000	No
Se 196.090 {472}	☒	14	Al	0.000005	0.000000	No
			Mn	0.000837	0.000000	No
			Fe	-0.000160	0.000000	No
			Co	-0.000157	0.000000	No
			Cu	0.000107	0.000000	No
			Mg	-0.000003	0.000000	No
			Cr	-0.000048	0.000000	No
			Mo	-0.000060	0.000000	No
			Ca	-0.000007	0.000000	No
			Na	-0.000006	0.000000	No
			B	-0.000110	0.000000	No
			Ti	-0.000067	0.000000	No
			V	-0.000070	0.000000	No
			Zn	-0.000058	0.000000	No
Si 251.611 {134}	☒	10	Ca	0.000006	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Na	0.000049	0.000000	No
			Mg	0.000036	0.000000	No
			B	-0.000732	0.000000	No
			Mn	0.000830	0.000000	No
			Mo	0.009831	0.000000	No
			Ti	0.006504	0.000000	No
			V	0.000256	0.000000	No
			Zn	0.000733	0.000000	No
			Fe	-0.000083	0.000000	No
Sn 189.989 {477}	☒	6	Fe	0.000006	0.000000	No
			Ca	-0.000003	0.000000	No
			Na	0.000003	0.000000	No
			Mg	0.000004	0.000000	No
			Ti	-0.001478	0.000000	No
			Zn	0.000107	0.000000	No
Sr 407.771 { 83}	☒	1	Ca	0.000009	0.000000	No
Sr 421.552 { 80}	☒	None				
Te 214.281 {457}	☒	11	Mo	0.000341	0.000000	No
			Ti	0.002474	0.000000	No
			V	-0.171245	0.000000	No
			Zn	-0.002905	0.000000	No
			Fe	-0.000278	0.000000	No
			Al	-0.000014	0.000000	No
			Mg	0.000003	0.000000	No
			Ca	0.000007	0.000000	No
			Na	0.000003	0.000000	No
			B	0.000321	0.000000	No
			Mn	-0.000102	0.000000	No
Ti 334.941 {101}	☒	5	Fe	-0.000000	0.000000	No
			Mn	0.000000	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	0.000161	0.000000	No
			Ca	0.000004	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.005004	0.000000	No
			Mo	-0.007135	0.000000	No
			Ti	-0.001460	0.000000	No
			V	-0.020145	0.000000	No
			Mn	0.001894	0.000000	No
			Fe	-0.000038	0.000000	No
			Cu	-0.000070	0.000000	No
			Cr	0.000181	0.000000	No
			Ca	0.000003	0.000000	No
			Zn	-0.000050	0.000000	No
V 292.402 {115}	☒	8	Cr	-0.003158	0.000000	No
			Mo	-0.008495	0.000000	No
			Ti	0.000800	0.000000	No
			Fe	0.000008	0.000000	No
			Mn	-0.000485	0.000000	No
			Cu	0.000072	0.000000	No
			Mg	-0.000002	0.000000	No
			Zn	0.000078	0.000000	No
Y 224.306 {450}*	☒	None				
Y 377.433 { 89}*	☒	None				
Y 377.433 { 89}2*	☒	None				
Zn 213.856 {458}	☒	12	Fe	0.000080	0.000000	No
			Mn	0.000094	0.000000	No
			Mg	0.000036	0.000000	No
			Cu	0.000365	0.000000	No
			Ca	0.000003	0.000000	No
			Na	0.000002	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			B	0.000128	0.000000	No
			Cr	0.000161	0.000000	No
			Co	0.000113	0.000000	No
			Mo	-0.000118	0.000000	No
			Ti	-0.000755	0.000000	No
			V	0.000129	0.000000	No
Zr 343.823 { 98}	☒	1	Fe	0.000031	0.000000	No

GPL Laboratories, LLLP

Linear Dynamic Ranges

Project: 710183 Instrument: iTEVA-Soil

Units: ug/L

Analyte	Wavelength/Mass	Linear Dynamic Range	Date of LDR
Lead	220.353	22000	11/14/07

GPL Laboratories, LLLP

Linear Dynamic Ranges

Project: 710183 Instrument: V3050

Units: ug/L

Analyte	Wavelength/Mass	Linear Dynamic Range	Date of LDR
Lead	220.353	22000	03/09/07

GPL Laboratories, LLLP

Preparation Log

Project: 710183 Instrument: iTEVA-Soil

Prep Method: Batch Number: 101469

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK101469	BLK101469	10/29/2007	1.00	100
BKS101469	BKS101469	10/29/2007	1.00	100
S 710183-007-007-1/1	SB-CZ-SS-2328-ST	10/29/2007	1.19	100
SP710183-007-007-1/1	SB-CZ-SS-2328-ST MS	10/29/2007	1.24	100
S 710183-008-008-1/1	SB-CZ-SS-2329-ST	10/29/2007	1.22	100
S 710183-009-009-1/1	SB-CZ-SS-2330-ST	10/29/2007	1.20	100
S 710183-010-010-1/1	SB-CZ-SS-2331-ST	10/29/2007	1.21	100
S 710183-011-011-1/1	SB-CZ-SS-2332-ST	10/29/2007	1.24	100
S 710183-012-012-1/1	SB-CZ-SS-2333-ST	10/29/2007	1.18	100
S 710183-013-013-1/1	SB-CZ-SS-2334-ST	10/29/2007	1.17	100
S 710183-014-014-1/1	SB-CZ-SS-2335-ST	10/29/2007	1.20	100
S 710183-015-015-1/1	SB-CZ-SS-2336-ST	10/29/2007	1.28	100
S 710183-016-016-1/1	SB-CZ-SS-2337-ST	10/29/2007	1.23	100
S 710183-017-017-1/1	SB-CZ-SS-2338-ST	10/29/2007	1.24	100
S 710183-018-018-1/1	SB-CZ-SS-2339-ST	10/29/2007	1.17	100
S 710183-019-019-1/1	SB-CZ-SS-2340-ST	10/29/2007	1.16	100
S 710183-020-020-1/1	SB-CZ-SS-2341-ST	10/29/2007	1.18	100
S 710183-021-021-1/1	SB-CZ-SS-2342-ST	10/29/2007	1.20	100
S 710183-022-022-1/1	SB-CZ-SS-2343-ST	10/29/2007	1.16	100
S 710183-023-023-1/1	SB-CZ-SS-2344-ST	10/29/2007	1.17	100
S 710183-024-024-1/1	SB-CZ-SS-2345-ST	10/29/2007	1.21	100
S 710183-025-025-1/1	SB-CZ-SS-2346-ST	10/29/2007	1.27	100
S 710183-026-026-1/1	SB-CZ-SS-2347-ST	10/29/2007	1.17	100
SD710183-007-007-1/1	SB-CZ-SS-2328-ST MSD	10/29/2007	1.27	100

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Preparation Log

Project: 710183 Instrument: iTEVA-Soil

Prep Method: Batch Number: 101683

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK101683	BLK101683	10/30/2007	1.00	100
BKS101683	BKS101683	10/30/2007	1.00	100
S 710183-029-029-1/1	SB-CZ-SS-2322-SD	10/30/2007	1.13	100
S 710183-030-030-1/1	SB-CZ-SS-2323-SD	10/30/2007	1.17	100
S 710183-031-031-1/1	SB-CZ-SS-2324-SD	10/30/2007	1.27	100
S 710183-032-032-1/1	SB-CZ-SS-2325-SD	10/30/2007	1.23	100
S 710183-033-033-1/1	SB-CZ-SS-2326-SD	10/30/2007	1.13	100
S 710183-034-034-1/1	SB-CZ-SS-2327-SD	10/30/2007	1.21	100
S 710183-035-035-1/1	SB-CZ-SS-2328-SD	10/30/2007	1.19	100
S 710183-036-036-1/1	SB-CZ-SS-2329-SD	10/30/2007	1.21	100
S 710183-037-037-1/1	SB-CZ-SS-2330-SD	10/30/2007	1.18	100
S 710183-038-038-1/1	SB-CZ-SS-2331-SD	10/30/2007	1.13	100
S 710183-039-039-1/1	SB-CZ-SS-2332-SD	10/30/2007	1.20	100
S 710183-040-040-1/1	SB-CZ-SS-2333-SD	10/30/2007	1.17	100
S 710183-041-041-1/1	SB-CZ-SS-2334-SD	10/30/2007	1.26	100
S 710183-042-042-1/1	SB-CZ-SS-2335-SD	10/30/2007	1.19	100
S 710183-043-043-1/1	SB-CZ-SS-2336-SD	10/30/2007	1.20	100
S 710183-044-044-1/1	SB-CZ-SS-2337-SD	10/30/2007	1.30	100
S 710183-045-045-1/1	SB-CZ-SS-2338-SD	10/30/2007	1.13	100
S 710183-046-046-1/1	SB-CZ-SS-2339-SD	10/30/2007	1.18	100
S 710183-027-027-1/1	SB-CZ-SS-2348-ST	10/30/2007	1.20	100
SP710183-027-027-1/1	SB-CZ-SS-2348-ST MS	10/30/2007	1.25	100
S 710183-028-028-1/1	SB-CZ-SS-2349-ST	10/30/2007	1.18	100
SD710183-027-027-1/1	SB-CZ-SS-2348-ST MSD	10/30/2007	1.28	100

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Preparation Log

Project:	710183	Instrument:	V3050
Prep Method:	Preparation for the Manual Cold	Batch Number:	101388

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK101388	BLK101388	10/30/2007	1.00	100
BKS101388	BKS101388	10/30/2007	1.00	100
S 710183-047-047-1/1	SB-CZ-SS-2340-SD	10/30/2007	1.15	100
SP710183-047-047-1/1	SB-CZ-SS-2340-SD MS	10/30/2007	1.20	100
S 710183-048-048-1/1	SB-CZ-SS-2341-SD	10/30/2007	1.16	100
S 710183-049-049-1/1	SB-CZ-SS-2342-SD	10/30/2007	1.26	100
S 710183-050-050-1/1	SB-CZ-SS-2343-SD	10/30/2007	1.14	100
S 710183-051-051-1/1	SB-CZ-SS-2344-SD	10/30/2007	1.24	100
S 710183-052-052-1/1	SB-CZ-SS-2345-SD	10/30/2007	1.22	100
S 710183-053-053-1/1	SB-CZ-SS-2346-SD	10/30/2007	1.18	100
S 710183-054-054-1/1	SB-CZ-SS-2347-SD	10/30/2007	1.25	100
S 710183-055-055-1/1	SB-CZ-SS-2348-SD	10/30/2007	1.17	100
S 710183-056-056-1/1	SB-CZ-SS-2349-SD	10/30/2007	1.25	100
SD710183-047-047-1/1	SB-CZ-SS-2340-SD MSD	10/30/2007	1.24	100

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Preparation Log

Project: 710183

Instrument: V3050

Batch Number: 101389

Prep Method:

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK101389	BLK101389	10/29/2020	1.00	100
BKS101389	BKS101389	10/29/2020	1.00	100
S 710166-039-039-1/1	SB-CZ-SS-2320-ST	10/29/2020	1.16	100
SP710166-039-039-1/1	SB-CZ-SS-2320-STMS	10/29/2020	1.20	100
S 710183-001-001-1/1	SB-CZ-SS-2322-ST	10/29/2020	1.18	100
S 710183-002-002-1/1	SB-CZ-SS-2323-ST	10/29/2020	1.25	100
S 710183-003-003-1/1	SB-CZ-SS-2324-ST	10/29/2020	1.17	100
S 710183-004-004-1/1	SB-CZ-SS-2325-ST	10/29/2020	1.21	100
S 710183-005-005-1/1	SB-CZ-SS-2326-ST	10/29/2020	1.25	100
S 710183-006-006-1/1	SB-CZ-SS-2327-ST	10/29/2020	1.23	100
SD710166-039-039-1/1	SB-CZ-SS-2320-STMSD MSD	10/29/2020	1.24	100

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Analysis Run Log

Project: 710183

Instrument: ITEVA-Soil

Data File Name: 071203.txt

Sample Name	Client ID	Analysis Date	Analysis Time
STD0		12/03/07	12:39 PM
STD1		12/03/07	12:42 PM
STD2		12/03/07	12:45 PM
STD3		12/03/07	12:48 PM
ICV		12/03/07	1:02 PM
ICB		12/03/07	1:05 PM
CCV1		12/03/07	1:08 PM
CCB1		12/03/07	1:12 PM
PQL		12/03/07	1:15 PM
ICSA		12/03/07	1:18 PM
ICSAB		12/03/07	1:22 PM
CCV2		12/03/07	1:32 PM
CCB2		12/03/07	1:35 PM
CCV3		12/03/07	2:12 PM
CCB3		12/03/07	2:15 PM
CCV4		12/03/07	2:52 PM
CCB4		12/03/07	2:55 PM
CCV5		12/03/07	3:32 PM
CCB5		12/03/07	3:36 PM
CCV6		12/03/07	4:12 PM
CCB6		12/03/07	4:15 PM
CCV7		12/03/07	4:52 PM
CCB7		12/03/07	4:56 PM
BLK101469	BLK101469	12/03/07	5:29 PM
CCV8		12/03/07	5:32 PM
CCB8		12/03/07	5:36 PM
BKS101469	BKS101469	12/03/07	5:39 PM
S 710183-007-007-1/1	SB-CZ-SS-2328-ST	12/03/07	5:43 PM
SP710183-007-007-1/1	SB-CZ-SS-2328-ST MS	12/03/07	5:46 PM
SD710183-007-007-1/1	SB-CZ-SS-2328-ST MSD	12/03/07	5:49 PM
SE710183-007-007-1/1	SB-CZ-SS-2328-ST	12/03/07	5:56 PM
S 710183-008-008-1/1	SB-CZ-SS-2329-ST	12/03/07	5:59 PM
S 710183-009-009-1/1	SB-CZ-SS-2330-ST	12/03/07	6:03 PM
CCV9		12/03/07	6:13 PM
CCB9		12/03/07	6:16 PM
S 710183-010-010-1/1	SB-CZ-SS-2331-ST	12/03/07	6:20 PM
S 710183-011-011-1/1	SB-CZ-SS-2332-ST	12/03/07	6:23 PM
S 710183-012-012-1/1	SB-CZ-SS-2333-ST	12/03/07	6:26 PM
S 710183-013-013-1/1	SB-CZ-SS-2334-ST	12/03/07	6:29 PM

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Analysis Run Log

Project: 710183

Instrument: iTEVA-Soil

Data File Name: 071203.txt

Sample Name	Client ID	Analysis Date	Analysis Time
S 710183-014-014-1/1	SB-CZ-SS-2335-ST	12/03/07	6:33 PM
S 710183-015-015-1/1	SB-CZ-SS-2336-ST	12/03/07	6:36 PM
S 710183-016-016-1/1	SB-CZ-SS-2337-ST	12/03/07	6:40 PM
S 710183-017-017-1/1	SB-CZ-SS-2338-ST	12/03/07	6:43 PM
S 710183-018-018-1/1	SB-CZ-SS-2339-ST	12/03/07	6:46 PM
S 710183-019-019-1/1	SB-CZ-SS-2340-ST	12/03/07	6:50 PM
CCV10		12/03/07	6:53 PM
CCB10		12/03/07	6:56 PM
S 710183-020-020-1/1	SB-CZ-SS-2341-ST	12/03/07	6:59 PM
S 710183-021-021-1/1	SB-CZ-SS-2342-ST	12/03/07	7:03 PM
S 710183-022-022-1/1	SB-CZ-SS-2343-ST	12/03/07	7:06 PM
S 710183-023-023-1/1	SB-CZ-SS-2344-ST	12/03/07	7:09 PM
S 710183-024-024-1/1	SB-CZ-SS-2345-ST	12/03/07	7:13 PM
S 710183-025-025-1/1	SB-CZ-SS-2346-ST	12/03/07	7:16 PM
S 710183-026-026-1/1	SB-CZ-SS-2347-ST	12/03/07	7:19 PM
BLK101683	BLK101683	12/03/07	7:23 PM
BKS101683	BKS101683	12/03/07	7:26 PM
S 710183-027-027-1/1	SB-CZ-SS-2348-ST	12/03/07	7:29 PM
CCV11		12/03/07	7:33 PM
CCB11		12/03/07	7:36 PM
SP710183-027-027-1/1	SB-CZ-SS-2348-ST MS	12/03/07	7:40 PM
SD710183-027-027-1/1	SB-CZ-SS-2348-ST MSD	12/03/07	7:43 PM
SE710183-027-027-1/1	SB-CZ-SS-2348-ST	12/03/07	7:50 PM
S 710183-028-028-1/1	SB-CZ-SS-2349-ST	12/03/07	7:53 PM
S 710183-029-029-1/1	SB-CZ-SS-2322-SD	12/03/07	7:56 PM
S 710183-030-030-1/1	SB-CZ-SS-2323-SD	12/03/07	8:00 PM
S 710183-031-031-1/1	SB-CZ-SS-2324-SD	12/03/07	8:03 PM
S 710183-032-032-1/1	SB-CZ-SS-2325-SD	12/03/07	8:07 PM
S 710183-033-033-1/1	SB-CZ-SS-2326-SD	12/03/07	8:10 PM
CCV12		12/03/07	8:13 PM
CCB12		12/03/07	8:17 PM
S 710183-034-034-1/1	SB-CZ-SS-2327-SD	12/03/07	8:20 PM
S 710183-035-035-1/1	SB-CZ-SS-2328-SD	12/03/07	8:23 PM
S 710183-036-036-1/1	SB-CZ-SS-2329-SD	12/03/07	8:27 PM
S 710183-037-037-1/1	SB-CZ-SS-2330-SD	12/03/07	8:30 PM
S 710183-038-038-1/1	SB-CZ-SS-2331-SD	12/03/07	8:33 PM
S 710183-039-039-1/1	SB-CZ-SS-2332-SD	12/03/07	8:37 PM
S 710183-040-040-1/1	SB-CZ-SS-2333-SD	12/03/07	8:40 PM
S 710183-041-041-1/1	SB-CZ-SS-2334-SD	12/03/07	8:43 PM

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Analysis Run Log

Project: 710183

Instrument: iTEVA-Soil

Data File Name: 071203.txt

Sample Name	Client ID	Analysis Date	Analysis Time
S 710183-042-042-1/1	SB-CZ-SS-2335-SD	12/03/07	8:47 PM
S 710183-043-043-1/1	SB-CZ-SS-2336-SD	12/03/07	8:50 PM
CCV13		12/03/07	8:53 PM
CCB13		12/03/07	8:57 PM
S 710183-044-044-1/1	SB-CZ-SS-2337-SD	12/03/07	9:00 PM
S 710183-045-045-1/1	SB-CZ-SS-2338-SD	12/03/07	9:03 PM
S 710183-046-046-1/1	SB-CZ-SS-2339-SD	12/03/07	9:07 PM
CCV14		12/03/07	9:33 PM
CCB14		12/03/07	9:37 PM

URIT Version 4.6.0

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Analysis Run Log

Project: 710183 Instrument: V3050

Data File Name: 071118V.ARC

Sample Name	Client ID	Analysis Date	Analysis Time
STD0		11/18/07	4:41 PM
STD1		11/18/07	4:55 PM
STD2		11/18/07	5:03 PM
STD3		11/18/07	5:11 PM
STD4		11/18/07	5:18 PM
IVICV		11/18/07	5:24 PM
BIICB		11/18/07	5:32 PM
CVCCV1		11/18/07	5:41 PM
BCCCB1		11/18/07	5:49 PM
REPORT LMT		11/18/07	6:00 PM
IAICSA		11/18/07	6:17 PM
IBICSAB		11/18/07	6:26 PM
CVCCV2		11/18/07	6:48 PM
BCCCB2		11/18/07	6:59 PM
BLK101388	BLK101388	11/18/07	8:09 PM
BKS101388	BKS101388	11/18/07	8:17 PM
S 710183-047-047-1/1	SB-CZ-SS-2340-SD	11/18/07	8:26 PM
CVCCV3		11/18/07	8:37 PM
BCCCB3		11/18/07	8:45 PM
SP710183-047-047-1/1	SB-CZ-SS-2340-SD MS	11/18/07	8:54 PM
SD710183-047-047-1/1	SB-CZ-SS-2340-SD MSD	11/18/07	9:02 PM
SE710183-047-047-1/1	SB-CZ-SS-2340-SD	11/18/07	9:19 PM
S 710183-048-048-1/1	SB-CZ-SS-2341-SD	11/18/07	9:27 PM
S 710183-049-049-1/1	SB-CZ-SS-2342-SD	11/18/07	9:35 PM
S 710183-050-050-1/1	SB-CZ-SS-2343-SD	11/18/07	9:44 PM
S 710183-051-051-1/1	SB-CZ-SS-2344-SD	11/18/07	9:52 PM
S 710183-052-052-1/1	SB-CZ-SS-2345-SD	11/18/07	10:00 PM
S 710183-053-053-1/1	SB-CZ-SS-2346-SD	11/18/07	10:09 PM
CVCCV4		11/18/07	10:20 PM
BCCCB4		11/18/07	10:28 PM
S 710183-054-054-1/1	SB-CZ-SS-2347-SD	11/18/07	10:37 PM
S 710183-055-055-1/1	SB-CZ-SS-2348-SD	11/18/07	10:45 PM
S 710183-056-056-1/1	SB-CZ-SS-2349-SD	11/18/07	10:53 PM
CVCCV5		11/19/07	12:03 AM
BCCCB5		11/19/07	12:11 AM
BLK101389	BLK101389	11/19/07	12:48 AM
BKS101389	BKS101389	11/19/07	12:56 AM
S 710166-039-039-1/1	SB-CZ-SS-2320-ST	11/19/07	1:04 AM
CVCCV6		11/19/07	1:41 AM

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Analysis Run Log

Project: 710183

Instrument: V3050

Data File Name: 071118V.ARC

Sample Name	Client ID	Analysis Date	Analysis Time
BCCCB6		11/19/07	1:49 AM
SP710166-039-039-1/1	SB-CZ-SS-2320-STMS	11/19/07	1:57 AM
SD710166-039-039-1/1	SB-CZ-SS-2320-STMSD MSD	11/19/07	2:06 AM
SE710166-039-039-1/1	SB-CZ-SS-2320-ST	11/19/07	2:22 AM
CVCCV7		11/19/07	3:24 AM
BCCCB7		11/19/07	3:32 AM
S 710183-001-001-1/1	SB-CZ-SS-2322-ST	11/19/07	4:39 AM
S 710183-002-002-1/1	SB-CZ-SS-2323-ST	11/19/07	4:48 AM
S 710183-003-003-1/1	SB-CZ-SS-2324-ST	11/19/07	4:56 AM
CVCCV8		11/19/07	5:07 AM
BCCCB8		11/19/07	5:15 AM

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Analysis Run Log

Project: 710183 Instrument: V3050

Data File Name: 071119V.ARC

Sample Name	Client ID	Analysis Date	Analysis Time
STD0		11/19/07	11:43 AM
STD1		11/19/07	11:51 AM
STD2		11/19/07	12:00 PM
STD3		11/19/07	12:08 PM
STD4		11/19/07	12:15 PM
IVICV		11/19/07	12:21 PM
BIICB		11/19/07	12:29 PM
CVCCV1		11/19/07	12:38 PM
BCCCB1		11/19/07	12:46 PM
REPORT LMT		11/19/07	1:07 PM
IAICSA		11/19/07	1:24 PM
IBICSAB		11/19/07	1:33 PM
CVCCV2		11/19/07	1:55 PM
BCCCB2		11/19/07	2:06 PM
CVCCV3		11/19/07	3:55 PM
BCCCB3		11/19/07	4:03 PM
CVCCV4		11/19/07	4:28 PM
BCCCB4		11/19/07	4:36 PM
CVCCV5		11/19/07	6:16 PM
BCCCB5		11/19/07	6:24 PM
CVCCV6		11/19/07	7:53 PM
BCCCB6		11/19/07	8:02 PM
CVCCV7		11/19/07	9:37 PM
BCCCB7		11/19/07	9:45 PM
CVCCV8		11/19/07	11:20 PM
BCCCB8		11/19/07	11:28 PM
S 710183-004-004-1/1	SB-CZ-SS-2325-ST	11/20/07	12:35 AM
S 710183-005-005-1/1	SB-CZ-SS-2326-ST	11/20/07	12:43 AM
S 710183-006-006-1/1	SB-CZ-SS-2327-ST	11/20/07	12:52 AM
CVCCV9		11/20/07	1:03 AM
BCCCB9		11/20/07	1:11 AM

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ICP ANALYSIS LOG

Instrument ID: Trace (375590) Inst. Method: TRACE Nebulizer: Concentric Analytical Batch No: 071106V
Profile: -0.00 5634 Intensity: 12729 At Setting: 678

Workorder	Client	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Comments / Dilution
711069	PARCOM		113	e	11-16-07	6010B	re run
710183	SCRA	101358	047	S	10-30-07	6010C	Pb only 100x on all
710179							
710199							
710166		101389	039		10-29-07		rerun 004 → 006
710183							rerun
710166			037		10-26-07		

KO 19/NOV/2007

Source Solution Numbers			
Stds.	Number	Stds.	Number
S0	129-116-10	ICV	42173
S1	42196	CCV	42200
S2	42197	ICSA	42009
S3	41944	ICSAB	42010
S4	42097	CRI	41895
S5	—	Low Ck	41820
Ins	41924	LR	42129

Post Digestion Spikes
Spike 9.9 mls of sample with 0.1 mls of 41873
Samples:
710183-047-047-X
710166-039-039-X
710166-001-001-X

Analyst: KO Date: 19/NOV/2007 Reviewed: RJ Date: 11-20-07

Supersedes GP_M_196

ICP ANALYSIS LOG

GPL - Maryland Laboratory | ICPST Analysis Log | Data File: 071118V.ARC

Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time
1	STD0		11/18/2007	16.41	31	PS710183-047-047-1/1		10/18/2007	21.10	61	BICSAB		11/10/2007	1:32	91	BLK 037		11/10/2007	5.52					
2	STD1		11/18/2007	16.55	32	SE710183-047-047-1/1		10/18/2007	21.19	62	CVCCV4		11/10/2007	1.41	92	BKS 037		11/10/2007	6.00					
3	STD2		11/18/2007	17.03	33	S710183-048-048-1/1		10/18/2007	21:27	63	BCCCB4		11/10/2007	1.49	93	S710186-001-001-1/1		10/10/2007	6.09					
4	STD3		11/18/2007	17:11	34	S710183-049-049-1/1		10/18/2007	21:35	64	SP710186-039-039-1/1		10/10/2007	1:57	94	SP710186-001-001-1/1		10/10/2007	6:17					
5	STD4		11/18/2007	17:18	35	S710183-050-050-1/1		10/18/2007	21.44	65	SD710186-039-039-1/1		10/10/2007	2.08	95	SD710186-001-001-1/1		10/10/2007	6:25					
6	MCV		11/18/2007	17.24	36	S710183-051-051-1/1		10/18/2007	21:52	66	PS710186-039-039-1/1		10/10/2007	2:14	96	PS710186-001-001-1/1		10/10/2007	6:34					
7	BICB		11/18/2007	17:32	37	S710183-052-052-1/1		10/18/2007	22.00	67	SE710186-039-039-1/1		10/10/2007	2:22	97	SE710186-001-001-1/1		10/10/2007	6:42					
8	CVCCV		11/18/2007	17:41	38	S710183-053-053-1/1		10/18/2007	22:09	68	S710186-040-040-1/1		10/10/2007	2:31	98	CVCCV5		11/10/2007	6:53					
9	BCCCB		11/18/2007	17:49	39	CVCCV3		11/18/2007	22:26	69	S710186-041-041-1/1		10/10/2007	2:39	99	BCCCB5		11/10/2007	7:02					
10	REPORT LIMIT		11/18/2007	18.06	40	BCCCB3		11/18/2007	22:28	70	S710186-042-042-1/1		10/10/2007	2:48	100	S710186-002-002-1/1		10/10/2007	7:10					
11	CRCRI		11/10/2007	18:09	41	S710183-054-054-1/1		10/18/2007	22:37	71	S710186-043-043-1/1		10/10/2007	2.56	101	S710186-003-003-1/1		10/10/2007	7:18					
12	IMCSA		11/10/2007	18:17	42	S710183-055-055-1/1		10/18/2007	22:46	72	S710186-044-044-1/1		10/10/2007	3:04	102	S710186-004-004-1/1		10/10/2007	7:27					
13	BICSAB		11/10/2007	18:25	43	S710183-056-056-1/1		10/18/2007	22:53	73	S710186-045-045-1/1		10/10/2007	3:13	103	S710186-005-005-1/1		10/10/2007	7:35					
14	LR		11/10/2007	18:34	44	S710179-001-001-1/1		10/18/2007	23.02	74	CVCCV4		11/10/2007	3:24	104	S710186-006-006-1/1		10/10/2007	7:43					
15	CVCCV3		11/10/2007	18:49	45	S710179-002-002-1/1		10/18/2007	23 10	75	BCCCB4		11/10/2007	3:32	105	S710186-007-007-1/1		10/10/2007	7:52					
16	BCCCB3		11/10/2007	18.59	46	S710186-001-001-1/1		10/18/2007	23.18	76	S710186-046-046-1/1		10/10/2007	3:41	106	CRCRI		11/10/2007	8:03					
17	BLK 113		11/10/2007	19.09	47	S710186-002-002-1/1		10/18/2007	23:27	77	S710186-047-047-1/1		10/10/2007	3:49	107	IMCSA		11/10/2007	8:11					
18	BKS 113		11/10/2007	19.18	48	S710186-003-003-1/1		10/18/2007	23:35	78	S710186-048-048-1/1		10/10/2007	3:57	108	BICSAB		11/10/2007	8:20					
19	B071115 BE1		11/10/2007	19.24	49	S710186-004-004-1/1		10/18/2007	23 43	79	S710186-049-049-1/1		10/10/2007	4 06	109	CVCCV5		11/10/2007	8:28					
20	S711060-001-003-1/1		11/10/2007	19:33	50	S710186-005-005-1/1		10/18/2007	23 52	80	S710186-050-050-1/1		10/10/2007	4:14	110	BCCCB6		11/10/2007	8:37					
21	SP711060-001-003-1/1		11/10/2007	19 41	51	CVCCV4		11/10/2007	0.03	81	S710186-051-051-1/1		10/10/2007	4:22	111	S710186-008-008-1/1		10/10/2007	8:45					
22	SD711060-001-003-1/1		11/10/2007	19:49	52	BCCCB4		11/10/2007	0:11	82	S710186-052-052-1/1		10/10/2007	4:31	112	S710186-009-009-1/1		10/10/2007	8:53					
23	SE711060-001-003-1/1		11/10/2007	19.58	53	S710186-006-006-1/1		10/10/2007	0.20	83	S710183-001-001-1/1		10/10/2007	4:39	113	S710186-010-010-1/1		10/10/2007	9:02					
24	BLK 045		11/10/2007	20 08	54	S710186-007-007-1/1		10/10/2007	0.28	84	S710183-002-002-1/1		10/10/2007	4:48										
25	BKS 045		11/10/2007	20:17	55	S710186-008-008-1/1		10/10/2007	0:36	85	S710183-003-003-1/1		10/10/2007	4:56										
26	S710183-047-047-1/1		10/10/2007	20:26	56	BLK 030		11/10/2007	0:48	86	CVCCV5		10/10/2007	5.07										
27	CVCCV3		11/10/2007	20:37	57	BKS 030		11/10/2007	0 56	87	BCCCB5		11/10/2007	5:15										
28	BCCCB3		11/10/2007	20:45	58	S710186-030-039-1/1		10/10/2007	1.04	88	S710183-004-004-1/1		10/10/2007	5:24										
29	SP710183-047-047-1/1		10/10/2007	20.54	59	CRCRI		11/10/2007	1:16	89	S710183-005-005-1/1		10/10/2007	5:32										
30	SD710183-047-047-1/1		10/10/2007	21:02	60	IMCSA		11/10/2007	1:24	90	S710183-006-006-1/1		10/10/2007	5.41										

Analyst Signature: Date: Analyst Signature:

Sample Dilutions:

Method: TRACEV2 Standard: STD0
Run Time: 11/18/07 16:41:45

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-.00270	.00065	.00078	.00171	.00085	.00129	.05357
#1	-.00250	.00091	-.00039	.00182	.00093	.00089	.04924
#2	-.00289	.00039	.00194	.00160	.00076	.00169	.05790

Elem	Cr	Co	Cu	Fe	Mg	Mn	Mn3441
Avge	.00040	-.00049	.00776	.00035	.00026	.00019	-.02089
#1	.00052	-.00055	.00736	.00055	.00034	.00023	-.01979
#2	.00028	-.00044	.00817	.00016	.00019	.00016	-.02200

Elem	Ni	K	Ag	Na	Tl	V	Zn
Avge	-.00031	.01351	-.00010	-.01782	-.00452	.00001	.00434
#1	-.00077	.01352	-.00005	-.01752	-.00454	-.00005	.00443
#2	.00016	.01351	-.00016	-.01811	-.00449	.00007	.00426

Elem	B	Mo	Sn	Ti	1/Pb	2/Pb	1/Se
Avge	.00176	-.00038	.00042	.00029	-.01703	.00152	-.00711
#1	.00191	-.00032	.00098	.00080	-.01729	.00220	-.00709
#2	.00162	-.00044	-.00014	-.00021	-.01677	.00083	-.00712

Elem	2/Se	2V
Avge	.0036	.00018
#1	.0034	.00014
#2	.0037	.00023

Standardization Rpt.

Method: TRACEV2 Standard: STD1
Run Time: 11/18/07 16:55:04

Elem	Al	Sb	As	Ba	Be	Cd	Cr
Avge	2.0788	.45745	.46959	.80920	.10355	2.7028	.27194
#1	2.0855	.45995	.46302	.81598	.10204	2.6919	.26970
#2	2.0721	.45495	.47617	.80242	.10506	2.7136	.27418

Elem	Co	Cu	Fe	Mn	Mn3441	Ni	Ag
Avge	.55838	.34203	1.5699	.51274	.14574	.91989	.54602
#1	.54869	.33861	1.5469	.50426	.14380	.91652	.53911
#2	.56807	.34545	1.5929	.52121	.14769	.92327	.55293

Elem	Tl	V	Zn	B	Mo	Sn	Ti
Avge	.20902	.22391	.88165	.62780	.44177	.31889	1.9958
#1	.20746	.22066	.86938	.62182	.43885	.30931	1.9827
#2	.21057	.22716	.89391	.63378	.44469	.32848	2.0089

Elem	1/Pb	2/Pb	1/Se	2/Se	2V
Avge	1.1398	.53113	.48936	.3241	.21761
#1	1.1299	.52137	.48482	.3180	.21438
#2	1.1497	.54089	.49391	.3302	.22083

Method: TRACEV2 Standard: STD2
Run Time: 11/18/07 17:03:27

Elem	Al	Sb	As	Ba	Be	Cd	Cr
Avge	4.1294	.91082	.92358	1.6380	.19945	5.2818	.53084
#1	4.1318	.91073	.92467	1.6421	.19894	5.2861	.53089
#2	4.1271	.91090	.92250	1.6339	.19997	5.2774	.53079

Elem	Co	Cu	Fe	Mn	Mn3441	Ni	Ag
Avge	1.0786	.66330	3.0378	.99133	.30919	1.8100	1.0623
#1	1.0767	.66224	3.0332	.98902	.30915	1.8110	1.0597
#2	1.0805	.66435	3.0423	.99364	.30924	1.8090	1.0649

Elem	Tl	V	Zn	B	Mo	Sn	Ti
Avge	.42321	.43473	1.6912	1.2237	.87314	.60223	3.9380
#1	.42538	.43389	1.6878	1.2205	.87194	.59949	3.9465
#2	.42104	.43557	1.6946	1.2268	.87433	.60498	3.9296

Elem	1/Pb	2/Pb	1/Se	2/Se	2V
Avge	2.2383	1.0266	.95838	.6257	.42283
#1	2.2362	1.0251	.96013	.6222	.42374
#2	2.2403	1.0280	.95664	.6292	.42191

Method: TRACEV2 Standard: STD3
Run Time: 11/18/07 17:11:50

Elem	Ca	Mg	K	Na
Avge	28.504	15.391	6.3560	3.2716
#1	28.530	15.403	6.3632	3.2784
#2	28.478	15.379	6.3489	3.2649

Standardization Rpt.

Method: TRACEV2 Standard: STD4
Run Time: 11/18/07 17:18:42

Elem	1/Pb	2/Pb
Avge	4.5674	2.2317
#1	4.5181	2.2253
#2	4.6166	2.2381

Standardization Report 11/18/07 05:24:26 PM page 1

Method: TRACEV2 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Al	308.215	Multiple	Standards	24115.0	64.0700	11/18/07 05:03:27
Sb	206.838	Multiple	Standards	1095.66	-.718020	11/18/07 05:03:27
As	189.042	Multiple	Standards	1067.82	-.850950	11/18/07 05:03:27
Ba	493.409	Multiple	Standards	615.244	-1.03379	11/18/07 05:03:27
Be	313.042	Multiple	Standards	495.487	-.424109	11/18/07 05:03:27
Cd	226.502	Multiple	Standards	189.319	-.272666	11/18/07 05:03:27
Ca	317.933	STD3	STD0	1.09029	.006348	11/18/07 05:18:42
Cr	267.716	Multiple	Standards	1860.43	-.773681	11/18/07 05:03:27
Co	228.616	Multiple	Standards	912.106	.405103	11/18/07 05:03:27
Cu	324.753	Multiple	Standards	1511.15	-11.7566	11/18/07 05:03:27
Fe	271.441	Multiple	Standards	32412.0	-15.5765	11/18/07 05:03:27
Pb	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Mg	279.078	STD3	STD0	1.22044	-.000452	11/18/07 05:18:42
Mn	257.610	Multiple	Standards	980.335	-.232293	11/18/07 05:03:27
Mn3441	344.199	Multiple	Standards	2981.82	62.2913	11/18/07 05:03:27
Ni	231.604	Multiple	Standards	547.854	.146696	11/18/07 05:03:27
K	766.491	STD3	STD0	1.07260	-.002417	11/18/07 05:18:42
Se	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Ag	328.068	Multiple	Standards	928.362	.061633	11/18/07 05:03:27
Na	330.232	STD3	STD0	1.11461	.003113	11/18/07 05:18:42
Tl	190.864	Multiple	Standards	2324.26	10.4981	11/18/07 05:03:27
V	292.402	Multiple	Standards	2269.09	-.064243	11/18/07 05:03:27
Zn	213.856	Multiple	Standards	587.944	-2.60343	11/18/07 05:03:27
B	249.678	Multiple	Standards	811.240	-1.46151	11/18/07 05:03:27
Mo	202.030	Multiple	Standards	1137.20	.415473	11/18/07 05:03:27
Sn	189.989	Multiple	Standards	1615.21	-.747802	11/18/07 05:03:27
Ti	334.941	Multiple	Standards	252.272	-.090834	11/18/07 05:03:27
1/Pb	220.351	Multiple	Standards	447.386	7.65151	11/18/07 05:18:42
2/Pb	220.352	Multiple	Standards	926.699	-1.36400	11/18/07 05:18:42
1/Se	196.021	Multiple	Standards	1019.99	7.21397	11/18/07 05:03:27
2/Se	196.022	Multiple	Standards	1541.01	-5.53238	11/18/07 05:03:27
2V	292.402	Multiple	Standards	2135.82	-.425149	11/18/07 05:03:27

Method: TRACEV2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	STD0	.000000	-.929804	.929804
		STD1	50000.0	50194.4	-194.371
		STD2	100000.	99644.9	355.094

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	STD0	.000000	-.004693	.004693
		STD1	500.000	500.490	-.490479
		STD2	1000.00	997.226	2.77386

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As	189.042	STD0	.000000	-.019758	.019758
		STD1	500.000	500.588	-.587524
		STD2	1000.00	985.369	14.6312

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba	493.409	STD0	.000000	.016368	-.016368
		STD1	500.000	496.821	3.17856
		STD2	1000.00	1006.74	-6.73706

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.042	STD0	.000000	-.004202	.004202
		STD1	50.0000	50.8820	-.881985
		STD2	100.000	98.4026	1.59737

CorCoef: 0.99981

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd	226.502	STD0	.000000	-.028942	.028942
		STD1	500.000	511.408	-11.4084
		STD2	1000.00	999.663	.336792

CorCoef: 0.99991

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Ca	317.933	STD0	.064753	.053568	.011185
		STD3	31.0841	28.5042	2.57989

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	STD0	.000000	-.029349	.029349
		STD1	500.000	505.150	-5.14987
		STD2	1000.00	986.820	13.1797

CorCoef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.616	STD0	.000000	-.044026	.044026
		STD1	500.000	509.706	-9.70618
		STD2	1000.00	984.191	15.8086

CorCoef: 0.99979

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu	324.753	STD0	.000000	-.024528	.024528
		STD1	500.000	505.104	-5.10428
		STD2	1000.00	990.586	9.41418

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	271.441	STD0	.000000	-4.11501	4.11501
		STD1	50000.0	50868.6	-868.574
		STD2	100000.	98445.1	1554.86

CorCoef: 0.99981

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Mg	279.078	STD0	-.000131	.000263	-.000394
		STD3	18.7835	15.3911	3.39241

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	STD0	.000000	-.041551	.041551
		STD1	500.000	502.422	-2.42221
		STD2	1000.00	971.604	28.3965

CorCoef: 0.99980

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn3441	344.199	STD0	.000000	-.011873	.011873
		STD1	500.000	496.874	3.12555
		STD2	1000.00	984.251	15.7489

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni	231.604	STD0	.000000	-.020566	.020566
		STD1	500.000	504.113	-4.11319
		STD2	1000.00	991.774	8.22644

CorCoef: 0.99995

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	.012078	.013514	-.001436
		STD3	6.81503	6.35602	.459013

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	-.034622	.034622
		STD1	500.000	506.966	-6.96609
		STD2	1000.00	986.235	13.7654

CorCoef: 0.99987

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Na	330.232	STD0	-.016744	-.017815	.001071
		STD3	3.64972	3.27164	.378082

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl	190.864	STD0	.000000	.001920	-.001920
		STD1	500.000	496.308	3.69223
		STD2	1000.00	994.152	5.84839

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	-.037068	.037068
		STD1	500.000	508.012	-8.01205
		STD2	1000.00	986.370	13.6302

CorCoef: 0.99985

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn	213.856	STD0	.000000	-.049721	.049721
		STD1	500.000	515.755	-15.7548
		STD2	1000.00	991.733	8.26721

CorCoef: 0.99973

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	-.030559	.030559
		STD1	500.000	507.833	-7.83255
		STD2	1000.00	991.218	8.78174

CorCoef: 0.99990

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo	202.030	STD0	.000000	-.015300	.015300
		STD1	500.000	502.794	-2.79440
		STD2	1000.00	993.349	6.65088

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	STD0	.000000	-.070841	.070841
		STD1	500.000	514.330	-14.3301
		STD2	1000.00	971.987	28.0129

CorCoef: 0.99943

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti	334.941	STD0	.000000	-.016784	.016784
		STD1	500.000	503.396	-3.39636
		STD2	1000.00	993.366	6.63434

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/Pb	220.351	STD0	.000000	.032197	-.032197
		STD1	500.000	517.575	-17.5746
		STD2	1000.00	1009.02	-9.01892
		STD4	2000.00	2051.02	-51.0195

CorCoef: 0.99959

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/Pb	220.352	STD0	.000000	.043067	-.043067
		STD1	500.000	490.832	9.16772
		STD2	1000.00	949.943	50.0566
		STD4	2000.00	2066.78	-66.7798

CorCoef: 0.99939

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/Se	196.021	STD0	.000000	-.034958	.034958
		STD1	500.000	506.362	-6.36249
		STD2	1000.00	984.759	15.2410

CorCoef: 0.99987

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/Se	196.022	STD0	.000000	-.036481	.036481
		STD1	500.000	493.923	6.07736
		STD2	1000.00	958.661	41.3394

CorCoef: 0.99985

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2V	292.402	STD0	.000000	-.032536	.032536
		STD1	500.000	464.342	35.6582
		STD2	1000.00	902.654	97.3455

CorCoef: 0.99986

Analysis Report QC Standard 11/18/07 05:32:50 PM

Operator:

Method: TRACEV2 Sample Name: IVICV
Run Time: 11/18/07 17:24:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	Q5293.970	417.8741	Q449.0233	Q428.7230	Q42.85688	Q42.45352	Q5366.855
#1	Q5320.449	416.4162	Q450.4847	Q429.8004	Q42.85463	Q42.25439	Q5361.249
#2	Q5267.492	419.3319	Q447.5620	Q427.6455	Q42.85914	Q42.65265	Q5372.459
Errors	QC Fail	QC Pass	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
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	417.1777	Q448.4567	Q422.9252	Q5254.543	Q428.9285	Q5469.189	Q429.7841
#1	417.4496	Q448.1554	Q424.0451	5247.770	Q428.9824	Q5473.933	Q429.5555
#2	416.9058	Q448.7579	Q421.8052	Q5261.315	Q428.8745	Q5464.444	Q430.0128
Errors	QC Pass	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	417.4767	Q426.2149	Q5594.190	Q438.7904	Q422.8145	10163.57	418.1173
#1	416.9852	Q425.9604	Q5608.232	Q435.1505	Q423.4741	10235.89	417.8515
#2	417.9683	Q426.4693	Q5580.146	Q442.4304	Q422.1549	10091.25	418.3830
Errors	NOCHECK	QC Fail	QC Fail	QC Fail	QC Fail	QC Pass	QC Pass
Value		400.0000	5000.000	400.0000	400.0000	10000.00	400.0000
Range		5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	Q432.0801	Q444.2158	Q441.0449	417.2192	Q436.7307	Q423.5361	427.4013
#1	Q432.6811	Q444.0327	Q441.7029	417.0596	Q435.3173	Q424.1763	426.9268
#2	Q431.4791	Q444.3989	Q440.3868	417.3789	Q438.1441	Q422.8960	427.8757
Errors	QC Fail	QC Fail	QC Fail	QC Pass	QC Fail	QC Fail	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	429.6920	437.7910	439.2901	429.7974
#1	430.0101	434.0586	435.6963	430.3361
#2	429.3739	441.5233	442.8838	429.2587
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 05:41:13 PM

Operator:

Method: TRACEV2 Sample Name: BIICB
Run Time: 11/18/07 17:32:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-6.56304	1.522254	-.717699	.1192054	-.081702	-.089682	149.7758
#1	-5.03022	3.923190	.1476876	.1125539	-.077852	-.157370	141.7069
#2	-8.09585	-.878682	-1.58308	.1258569	-.085552	-.021993	157.8447
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.0967761	.2827728	3.570211	-6.87365	.1392457	1.645916	.0199580
#1	.5713068	1.041510	3.516935	-5.84860	.9398848	-.273478	.0187490
#2	-.377755	-.475964	3.623487	-7.89869	-.661394	3.565310	.0211670
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-6.15755	.0120529	-1.63110	.0597363	.3643500	-64.9109	3.592022
#1	-6.67070	-.006420	-.335309	-.470567	.7540871	-54.0920	.9324732
#2	-5.64440	.0305263	-2.92689	.5900401	-.025387	-75.7298	6.251571
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.167784	-.074808	.2023582	1.557974	-.359901	.1943580	.4514290
#1	-.219744	-.089431	1.136210	2.030865	1.170054	.4379143	2.997574
#2	-.115824	-.060185	-.731494	1.085083	-1.88986	-.049198	-2.09472
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.016951	.6534765	-.237239	-.225619
#1	-.089063	1.324679	-1.36829	.0057607
#2	.0551606	-.017726	.8938165	-.456998
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 05:49:37 PM page 1

Method: TRACEV2 Sample Name: CVCCV Operator:
Run Time: 11/18/07 17:41:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51950.35	514.1350	521.3165	494.5225	51.32684	498.2150	104117.0
#1	52416.89	515.9002	527.1091	499.2277	51.90808	502.9245	105122.6
#2	51483.81	512.3699	515.5239	489.8173	50.74560	493.5055	103111.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	507.2344	513.7860	525.0524	51144.98	508.5795	106884.9	517.7710
#1	511.7069	518.6601	530.4810	51635.75	512.5467	107937.7	523.5093
#2	502.7618	508.9119	519.6238	50654.19	504.6124	105832.1	512.0326
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	510.5792	496.5752	26191.53	530.7795	533.2584	101282.5	507.5657
#1	514.0629	501.6136	26438.30	532.8952	538.6686	102070.4	510.7845
#2	507.0955	491.5368	25944.76	528.6638	527.8481	100494.7	504.3469
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	521.7626	527.6298	528.4746	510.2190	529.0794	514.4358	504.8114
#1	527.6362	533.0600	533.1090	513.4346	533.7318	519.5162	509.1576
#2	515.8890	522.1995	523.8401	507.0034	524.4271	509.3554	500.4652
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	510.4636	523.3959	534.4712	524.1681
#1	514.2412	524.5451	537.0701	529.7546
#2	506.6859	522.2468	531.8722	518.5815
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 05:58:00 PM page 1

Method: TRACEV2 Sample Name: BCCCB Operator:
Run Time: 11/18/07 17:49:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	.1080472	-1.02503	-2.49515	.0639201	-.076422	-.061524	153.5236
#1	1.133508	.8370623	-3.43111	.1147444	-.068335	-.065502	156.4334
#2	-.917414	-2.88713	-1.55919	.0130959	-.084509	-.057545	150.6138
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.040143	-.059112	3.553805	4.135974	-.169417	19.34881	-.009316
#1	.1632969	.2954762	3.830189	11.55409	-.533784	24.91699	.0513043
#2	-.243584	-.413700	3.277420	-3.28215	.1949504	13.78063	-.069936
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-7.65642	.3767363	7.641752	-.258017	.5044217	-52.7501	4.637890
#1	-6.14788	.6974090	18.37110	.0339700	.5954070	59.06693	6.681727
#2	-9.16497	.0560637	-3.08760	-.550004	.4134364	-164.567	2.594053
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.060140	-.148383	.1420920	2.283002	.1798587	.0364571	2.810034
#1	.0479169	-.036152	.3809797	2.538307	1.184424	.2412337	1.698813
#2	-.168196	-.260615	-.096796	2.027698	-.824707	-.168320	3.921254
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.65925	2.911691	-1.84298	-.093871
#1	-1.65019	3.041744	-1.47002	.5096951
#2	-1.66830	2.781637	-2.21593	-.697437
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 06:09:15 PM page 1

Method: TRACEV2 Sample Name: REPORT LMT Operator:
Run Time: 11/18/07 18:00:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	204.8062	18.54719	19.13570	4.990601	1.890104	5.700234	1003.019
#1	207.6276	18.32646	18.72839	5.031498	1.907382	5.611598	991.8679
#2	201.9849	18.76794	19.54301	4.949704	1.872826	5.788869	1014.171
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	6.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	5.001320	5.005256	10.54091	147.8365	9.811966	258.4144	4.697120
#1	4.730071	4.684482	10.24764	143.0547	9.221918	257.0595	4.661956
#2	5.272568	5.326029	10.83417	152.6184	10.40201	259.7693	4.732283
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7.011393	10.11433	239.4872	20.74101	5.549449	2552.791	32.36150
#1	5.718117	10.42121	234.3268	19.94225	5.531873	2464.197	31.72962
#2	8.304669	9.807458	244.6475	21.53977	5.567024	2641.384	32.99339
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		10.00000	250.0000		5.000000	2500.000	30.00000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	9.708745	19.58462	16.38434	5.472393	23.22965	24.73051	9.583681
#1	9.486235	19.60166	16.27010	5.334102	22.22258	24.64974	10.43733
#2	9.931255	19.56759	16.49857	5.610684	24.23672	24.81128	8.730029
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	9.926007	18.91152	21.65565	9.013210
#1	8.614113	19.71564	20.05545	8.939071
#2	11.23790	18.10741	23.25584	9.087349
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 06:17:37 PM

Operator:

Method: TRACEV2 Sample Name: CRCRI
Run Time: 11/18/07 18:09:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	403.7913	124.6362	18.71816	414.8663	9.742829	10.11665	563.3008
#1	402.0109	123.5989	18.19271	414.9707	9.557625	9.875994	516.8576
#2	405.5717	125.6735	19.24362	414.7619	9.928034	10.35730	609.7439
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	500.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	19.52352	105.6452	50.81165	199.8035	4.569648	526.8710	29.46858
#1	19.34071	103.1095	49.18543	200.9324	Q4.266941	516.3447	28.76174
#2	19.70633	108.1808	52.43787	198.6746	4.872354	537.3972	30.17543
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	28.66735	81.94751	509.0408	11.92071	19.76818	1143.371	22.68630
#1	29.52677	81.01944	503.9154	12.26174	19.20790	1153.420	23.54200
#2	27.80793	82.87559	514.1663	11.57969	20.32846	1133.322	21.83060
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		80.00000	500.0000	10.00000	20.00000	1000.000	20.00000
Range		25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	103.7004	42.61248	14.36327	5.635678	24.72197	25.63503	6.390571
#1	101.7461	41.71664	13.68747	5.232926	23.18338	25.24717	3.870640
#2	105.6547	43.50832	15.03907	6.038431	26.26055	26.02290	8.910502
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	100.0000	40.00000	15.00000	5.000000	25.00000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	3.659084	13.83610	10.96292	98.88579
#1	4.464990	13.94135	11.42183	97.07719
#2	2.853177	13.73086	10.50401	100.6944
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IAICSA Operator:
Run Time: 11/18/07 18:17:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	488479.1	-5.48860	-1.86838	1.227141	-.243847	5.416116	513148.8
#1	488437.7	-6.40968	-2.09844	1.222822	-.224649	5.368040	513714.6
#2	488520.4	-4.56752	-1.63832	1.231461	-.263044	5.464191	512583.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1.806228	2.668029	3.483700	192283.9	-.562051	509746.2	Q7.485263
#1	1.597598	2.876189	3.825794	192407.9	-.178992	509993.3	Q8.425199
#2	2.014858	2.459870	3.141607	192159.9	-.945110	509499.0	Q6.545326
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	48.44411	4.274638	23.97962	4.143840	-.000722	-238.930	-2.36374
#1	49.18767	3.813974	26.70553	3.835393	-.151942	-259.059	-3.86713
#2	47.70055	4.735302	21.25371	4.452288	.1504975	-218.801	-.860355
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2350271	1.927455	2.877582	1.093643	-.216691	12.34856	-.910080
#1	-.073937	2.175167	2.893911	1.065422	1.212642	12.37519	-.296783
#2	.5439911	1.679743	2.861253	1.121863	-1.64603	12.32193	-1.52338
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.388149	6.498721	2.966289	9.292979
#1	-.120209	.3025701	5.601688	9.225626
#2	-.656090	12.69487	.3308907	9.360333
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 06:34:22 PM page 1

Method: TRACEV2 Sample Name: IBICSAB Operator:
Run Time: 11/18/07 18:26:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	507081.7	634.2880	105.1553	509.2197	519.3843	976.9408	549813.1
#1	502823.9	633.0847	104.8232	505.4905	514.7075	968.8727	544514.2
#2	511339.4	635.4913	105.4874	512.9488	524.0612	985.0088	555112.1
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	512.3050	513.5656	567.1681	207902.5	47.49360	550941.1	540.1346
#1	507.8843	508.5505	562.0073	206000.0	47.20454	546119.6	535.2535
#2	516.7257	518.5806	572.3289	209805.0	47.78267	555762.7	545.0158
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	553.4757	969.3210	Q6423.741	62.01234	229.9308	10866.41	103.8491
#1	549.0891	959.9834	Q6362.628	60.66559	227.7267	10778.51	101.6769
#2	557.8624	978.6587	Q6484.854	63.35910	232.1348	10954.32	106.0212
Errors	NOCHECK	QC Pass	QC Fail	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	537.0549	1088.111	1126.445	1041.787	1116.968	1050.041	57.09477
#1	532.3248	1079.126	1117.919	1029.492	1104.739	1040.453	59.31380
#2	541.7852	1097.096	1134.971	1054.082	1129.197	1059.628	54.87573
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	42.69291	63.18421	61.42632	576.3456
#1	41.14980	64.79962	58.59850	570.9126
#2	44.23602	61.56880	64.25413	581.7786
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: LR Operator:
Run Time: 11/18/07 18:34:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	198.7364	5087.927	2098.326	9668.311	505.7331	2005.823	350.5942
#1	211.4081	5013.855	2073.571	9510.943	498.1807	1976.277	366.1157
#2	186.0646	5162.000	Q2123.080	9825.680	513.2855	2035.370	335.0726
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	10322.14	10433.55	Q10617.42	524044.9	20161.57	118.2422	10274.84
#1	10163.25	10286.73	10462.47	516544.1	19892.00	134.6763	10128.44
#2	10481.03	Q10580.38	Q10772.37	Q531545.8	20431.14	101.8082	10421.23
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	NOCHECK	QC Pass
Value	10000.00	10000.00	10000.00	500000.0	20000.00		10000.00
Range	5.000000	5.000000	5.000000	5.000000	5.000000		5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	10330.86	7458.408	27.56022	Q2108.631	Q1063.961	477.5892	2034.372
#1	10178.90	7346.198	15.03257	2080.366	1049.451	475.3493	2009.266
#2	10482.82	7570.619	40.08787	Q2136.895	Q1078.470	479.8291	2059.478
Errors	NOCHECK	QC Pass	NOCHECK	QC Fail	QC Fail	NOCHECK	QC Pass
Value		7500.000		2000.000	1000.000		2000.000
Range		5.000000		5.000000	5.000000		5.000000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	Q10588.04	3081.674	5184.515	9969.634	10755.50	20471.95	19792.02
#1	10437.12	3037.237	5115.528	9804.278	10618.64	20182.56	19521.46
#2	Q10738.96	3126.112	Q5253.501	10134.99	10892.35	20761.34	20062.59
Errors	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	10000.00	3000.000	5000.000	10000.00		20000.00	
Range	5.000000	5.000000	5.000000	5.000000		5.000000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	20346.34	2069.296	2128.299	10600.47
#1	20077.27	2039.495	2100.803	10453.72
#2	20615.41	2099.098	2155.795	10747.23
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

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Method: TRACEV2 Sample Name: CVCCV3 Operator:
Run Time: 11/18/07 18:48:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	53210.32	533.4832	547.4014	498.7342	54.08385	516.9524	109383.9
#1	53123.92	533.1685	546.0300	498.6502	53.90420	515.9604	109017.5
#2	53296.72	533.7979	548.7726	498.8182	54.26350	517.9445	109750.2
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	535.5619	546.9836	Q552.7655	54230.55	534.2776	Q113563.4	549.6995
#1	533.9362	545.2498	Q551.2934	54068.53	533.1431	Q113212.7	547.9177
#2	537.1876	548.7175	Q554.2377	54392.57	535.4121	Q113914.1	Q551.4813
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	533.1119	515.3171	27478.92	Q556.4575	Q563.4989	103582.2	530.8062
#1	532.3123	514.9059	27397.59	Q551.1296	Q561.7343	103523.0	527.1094
#2	533.9115	515.7284	Q27560.26	Q561.7855	Q565.2634	103641.5	534.5029
Errors	NOCHECK	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	Q553.0870	Q557.7201	Q556.6161	532.6726	Q567.7816	534.5466	526.1046
#1	Q551.0582	Q556.2604	Q555.4891	529.1374	Q568.7694	533.1498	524.6131
#2	Q555.1157	Q559.1798	Q557.7431	536.2077	Q566.7937	535.9433	527.5960
Errors	QC Fail	QC Fail	QC Fail	QC Pass	QC Fail	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	538.3652	545.2811	562.0457	556.0983
#1	537.4092	539.7716	556.8085	553.9260
#2	539.3212	550.7905	567.2828	558.2705
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 07:08:00 PM page 1

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/18/07 18:59:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	1.826172	-1.08309	-2.83603	.1116382	-.092515	-.149630	204.1649
#1	3.730826	-2.33482	-4.27531	.1464586	-.087235	-.145609	211.4781
#2	-.078483	.1686360	-1.39675	.0768177	-.097794	-.153651	196.8518
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.023658	.0613950	4.884511	12.41819	-.958711	16.35542	.0201618
#1	-.229143	-.193066	5.048967	15.13825	-.893838	22.21948	.0795236
#2	.1818272	.3158556	4.720054	9.698123	-1.02358	10.49137	-.039200
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-7.95965	.6799109	13.22382	-1.11579	.7962078	71.14532	3.613439
#1	-7.72670	.7453664	11.15891	-.650089	.9865754	69.47801	1.990503
#2	-8.19260	.6144554	15.28873	-1.58149	.6058401	72.81265	5.236374
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2703879	.0696574	.2956749	2.242305	-1.16254	.0995930	.0694206
#1	.2141869	.1703113	.3927901	2.127450	-.630850	.0623354	1.751843
#2	.3265889	-.030997	.1985597	2.357160	-1.69423	.1368506	-1.61300
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.47288	1.518371	-2.43297	.2175776
#1	-2.21679	1.990591	-1.97054	.0791068
#2	-.728985	1.046151	-2.89541	.3560483
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BLK 113 Operator:
Run Time: 11/18/07 19:08:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	3.304934	-2.23626	-2.83404	.0496127	-.084812	-.131061	260.9299
#1	2.604064	-2.40049	-2.99711	.0216482	-.084096	-.133622	255.0640
#2	4.005804	-2.07203	-2.67098	.0775773	-.085528	-.128499	266.7958
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	.3204860	-1.26959	H5.188701	-3.57135	.4719577	3.999226	.0433127
#1	-.040534	-1.76355	4.908295	1.252213	.4521547	1.353938	.0563185
#2	.6815064	-.775620	H5.469106	-8.39490	.4917607	6.644514	.0303068
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-10.2809	-.040478	.9277360	.1265096	.3223363	150.4259	.4989915
#1	-13.0494	.1735481	-.577676	.6673233	-.324052	96.07855	2.000857
#2	-7.51252	-.254503	2.433148	-.414304	.9687242	204.7733	-1.00287
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.3526618	2.543107	7.229170	.9290709	-1.87527	.2699348	2.275398
#1	-.007816	2.517356	6.824350	.6101605	-2.25302	.1873786	.2184250
#2	.7131400	2.568857	H7.633989	1.247981	-1.49751	.3524910	4.332371
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.429871	-6.27937	3.329334	-.234507
#1	.5689091	-6.35491	4.178322	-.437744
#2	-1.42865	-6.20383	2.480346	-.031271
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BKS 113 Operator:
Run Time: 11/18/07 19:16:27
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	H10653.26	H106.5953	H106.3747	H1006.974	H53.26066	H106.4631	H11175.05
#1	H10668.08	H106.5346	H106.6174	H1007.394	H53.48125	H106.5573	H11232.34
#2	H10638.44	H106.6561	H106.1321	H1006.554	H53.04007	H106.3688	H11117.75
Errors	LC High	LC High	LC High	LC High	LC High	LC High	LC High
High	6000.000	60.00000	60.00000	600.0000	30.00000	60.00000	6000.000
Low	4000.000	40.00000	40.00000	400.0000	20.00000	40.00000	4000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	H542.6658	H543.3693	H547.0204	H10923.77	H1066.668	H11347.86	H1100.910
#1	H544.5111	H546.1482	H548.9107	H10975.53	H1069.544	H11400.86	H1106.306
#2	H540.8206	H540.5903	H545.1301	H10872.02	H1063.791	H11294.86	H1095.514
Errors	LC High	LC High	LC High	LC High	LC High	LC High	LC High
High	300.0000	300.0000	300.0000	6000.000	600.0000	6000.000	600.0000
Low	200.0000	200.0000	200.0000	4000.000	400.0000	4000.000	400.0000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1062.253	H524.9281	H11856.69	H103.7738	H112.0139	H10514.13	H101.5490
#1	1066.893	H526.5629	H11885.24	H104.6332	H112.7302	H10520.32	H101.6492
#2	1057.614	H523.2932	H11828.13	H102.9143	H111.2977	H10507.94	H101.4488
Errors	NOCHECK	LC High	LC High	LC High	LC High	LC High	LC High
High		300.0000	6000.000	60.00000	60.00000	6000.000	60.00000
Low		200.0000	4000.000	40.00000	40.00000	4000.000	40.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	H558.8667	H1105.918	H1061.254	H532.7717	H573.2355	H2117.375	1054.701
#1	H561.1561	H1111.295	H1066.084	H533.5222	H575.4003	H2124.331	1056.743
#2	H556.5773	H1100.542	H1056.423	H532.0214	H571.0707	H2110.419	1052.659
Errors	LC High	LC High	LC High	LC High	LC High	LC High	NOCHECK
High	300.0000	600.0000	600.0000	300.0000	300.0000	1200.000	
Low	200.0000	400.0000	400.0000	200.0000	200.0000	800.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1072.650	97.70299	106.8092	558.3647
#1	1075.945	98.04685	107.9264	560.5140
#2	1069.357	97.35912	105.6919	556.2155
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: B071115 BE1 Operator:
Run Time: 11/18/07 19:24:49
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	1.260265	-.837250	-.084888	.1895390	-.093525	-.216715	271.5385
#1	3.480122	-1.63144	-.297409	.3464605	-.037354	-.025135	275.9089
#2	-.959593	-.043058	.1276329	.0326175	-.149697	-.408295	267.1680
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.6291273	-.809477	4.831326	3.031365	.7257262	1.778826	.1968800
#1	.9977173	-.287161	5.340691	16.06655	.9196297	9.785804	.3200567
#2	.2605374	-1.33179	4.321960	-10.0038	.5318227	-6.22815	.0737034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-10.8636	-.484651	48.87960	.0520402	.6572460	154642.9	.3487881
#1	-6.34865	.4138905	60.81724	1.938685	.4470195	154184.4	2.701325
#2	L-15.3785	-1.38319	36.94196	-1.83460	.8674725	155101.4	-2.00375
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.145111	4.568682	3.106922	1.823767	1.380797	1.187557	6.936875
#1	-.227657	4.783709	3.387951	2.356548	.9446133	1.342456	6.746485
#2	-.062565	4.353654	2.825893	1.290986	1.816980	1.032657	7.127265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-2.37995	-4.80011	2.478000	-.457009
#1	-1.99390	-4.02628	4.921051	.0972801
#2	-2.76600	-5.57393	.0349492	-1.01130
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711069-001-003-1/1 Operator:
Run Time: 11/18/07 19:33:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	9.087129	-4.30412	-1.31041	74.41515	-.035853	-.090935	4082.109
#1	2.325371	-4.28762	-1.61445	74.22418	-.070314	-.301123	4100.017
#2	15.84889	-4.32061	-1.00638	74.60612	-.001391	.1192519	4064.202
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.044904	-.439679	5.026486	-17.8386	-.237332	3076.332	95.35465
#1	-.199380	-.432407	4.719189	-38.0918	-.444645	3082.022	95.69673
#2	.1095730	-.446952	5.333784	2.414696	-.030019	3070.643	95.01256
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	79.20332	11.46856	381.2254	-.171564	-.445881	143915.9	.8148506
#1	73.07564	10.81240	378.3627	2.612179	-.584231	143988.0	-1.80124
#2	85.33099	12.12473	384.0880	-2.95531	-.307532	143843.8	3.430942
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.371115	15.82906	5.402787	.6284325	.0280366	.5172358	.2588826
#1	-.843958	15.84197	4.769321	.9773253	-.265178	.4058950	.1721228
#2	.1017278	15.81614	6.036254	.2795397	.3212507	.6285766	.3456425
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.485550	-5.56991	2.527495	-1.06794
#1	-.753140	-3.63153	5.733921	-1.31388
#2	-.217960	-7.50829	-.678931	-.822001
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SP711069-001-003-1/1 Operator:
Run Time: 11/18/07 19:41:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10404.64	103.6818	102.6524	1059.450	50.50045	102.2700	14192.83
#1	10483.62	105.0865	104.6109	1071.025	50.49605	102.7600	14196.72
#2	10325.66	102.2772	100.6939	1047.875	50.50484	101.7801	14188.94
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	517.1455	514.6622	525.5194	10322.79	1019.219	13643.65	1129.839
#1	518.6564	513.6364	526.1527	10332.53	1016.387	13628.35	1128.059
#2	515.6346	515.6880	524.8860	10313.04	1022.050	13658.94	1131.620
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1103.346	516.1570	12108.27	101.0419	107.1017	151912.3	102.7995
#1	1105.826	519.7218	12042.78	102.6870	106.8906	152859.0	105.7167
#2	1100.867	512.5923	12173.76	99.39677	107.3127	150965.7	99.88235
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	529.8763	1064.291	1022.763	513.7655	542.1418	2040.666	1012.720
#1	529.8285	1064.220	1024.622	515.2246	537.4236	2050.039	1008.818
#2	529.9242	1064.362	1020.904	512.3064	546.8600	2031.293	1016.623
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1022.468	96.02628	103.5497	528.8564
#1	1020.172	96.59060	105.7352	529.4202
#2	1024.764	95.46197	101.3642	528.2927
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SD711069-001-003-1/1 Operator:
Run Time: 11/18/07 19:49:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10845.68	104.3404	104.8299	1077.139	51.27628	104.1953	14516.77
#1	10838.77	104.4935	105.2044	1075.999	51.44886	104.3841	14543.00
#2	10852.58	104.1874	104.4555	1078.279	51.10370	104.0066	14490.53
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	526.8563	525.6853	533.1724	10569.00	1033.355	13965.22	1151.606
#1	528.2640	526.9976	534.0069	10592.20	1035.452	13993.23	1154.286
#2	525.4487	524.3729	532.3378	10545.80	1031.258	13937.21	1148.926
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1122.406	526.4883	12453.35	104.7413	109.0049	153811.0	103.4874
#1	1124.437	527.0443	12461.19	104.0357	108.7880	153397.3	104.1820
#2	1120.375	525.9322	12445.51	105.4468	109.2218	154224.7	102.7929
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	539.6779	1084.859	1035.470	523.0746	551.4627	2083.690	1021.591
#1	540.9262	1086.394	1037.982	521.7835	553.0917	2084.190	1023.310
#2	538.4296	1083.325	1032.958	524.3657	549.8335	2083.190	1019.872
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1039.237	99.72458	107.2496	538.2938
#1	1041.523	98.46564	106.8208	538.8983
#2	1036.951	100.9835	107.6784	537.6893
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SE711069-001-003-1/1 Operator:
Run Time: 11/18/07 19:58:13
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-1.71194	.0060184	-1.81523	15.36000	-.069311	-.167978	1023.603
#1	3.037947	.4385882	-1.64971	15.53071	-.051786	-.082656	1009.225
#2	-6.46184	-.426551	-1.98075	15.18929	-.086837	-.253299	1037.980
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.3220074	-.090996	5.632249	-2.82108	-.157431	659.8405	19.69556
#1	.5284324	.1277707	5.764941	-3.28804	-.789695	660.6385	19.72927
#2	.1155824	-.309763	5.499557	-2.35412	.4748336	659.0424	19.66185
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7.705128	2.894679	95.99361	-.296257	.3055809	29145.72	3.268761
#1	8.969480	2.369504	101.3092	.8702635	.4096482	29305.79	3.620237
#2	6.440775	3.419855	90.67801	-1.46278	.2015136	28985.65	2.917285
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0522506	4.618038	2.705338	1.899145	.4040277	.6720914	1.198720
#1	.1099067	4.734622	3.291002	2.637273	1.962818	.9389851	1.747180
#2	-.005406	4.501454	2.119673	1.161018	-1.15476	.4051978	.6502611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.835619	-.150113	-.369443	-.086366
#1	-2.05824	1.641855	.4843553	-.092324
#2	.3870066	-1.94208	-1.22324	-.080409
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BLK 045 Operator:
Run Time: 11/18/07 20:09:24
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	1.757856	.3691448	-1.45708	.0776787	-.088390	-.003551	214.7510
#1	2.832891	1.703262	-2.57628	.0908459	-.084424	-.019208	234.8027
#2	.6828222	-.964973	-.337883	.0645116	-.092356	.0121049	194.6994
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	1.469590	-1.57596	4.402715	13.00165	1.390974	7.424125	.3598931
#1	1.449373	-1.58791	H5.200625	11.71227	1.518022	4.484383	.3667648
#2	1.489806	-1.56401	3.604806	14.29104	1.263927	10.36387	.3530215
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-10.4188	-1.40422	24.77835	1.284339	.3642213	507.6335	-6.45237
#1	-10.2328	-1.21642	31.19622	-.003167	.2746161	507.3997	-7.90532
#2	-10.6048	-1.59202	18.36048	2.571845	.4538265	507.8673	-4.99941
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0513907	4.387353	1.303408	1.172554	H27.67789	.8327659	7.444173
#1	.1098857	4.446863	1.580262	1.281379	H27.71071	.8057340	6.947637
#2	-.007104	4.327842	1.026553	1.063729	H27.64506	.8597978	7.940710
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.63573	-12.3160	8.084386	-.047124
#1	-1.19690	-13.0592	6.524745	.1508048
#2	-2.07457	-11.5728	9.644027	-.245052
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BKS 045 Operator:
Run Time: 11/18/07 20:17:45
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10524.76	104.2390	100.9060	1018.395	52.78460	103.7706	10808.06
#1	10529.60	104.2221	104.0170	1019.172	52.62936	103.5614	10776.03
#2	10519.92	104.2559	97.79511	1017.619	52.93983	103.9798	10840.10
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	537.3396	525.8977	543.0327	10749.43	1028.744	10880.48	1073.038
#1	536.0728	524.3068	542.4356	10714.25	1025.667	10853.71	1070.016
#2	538.6064	527.4885	543.6299	10784.60	1031.822	10907.25	1076.059
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1046.593	515.4426	10642.43	96.48412	107.0697	10684.94	99.23052
#1	1044.033	515.2678	10632.98	96.31827	106.8085	10764.85	97.62054
#2	1049.155	515.6176	10651.88	96.64996	107.3308	10605.02	100.8405
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	548.1472	1061.081	1003.100	542.5569	589.6928	2158.194	1023.715
#1	547.0393	1058.335	1001.381	541.2234	588.0381	2154.561	1025.753
#2	549.2551	1063.828	1004.820	543.8903	591.3474	2161.826	1021.676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1031.259	84.01556	102.7184	548.5240
#1	1025.624	84.46452	102.2451	547.5828
#2	1036.895	83.56661	103.1916	549.4653
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-047-047-1/1 Operator:
Run Time: 11/18/07 20:26:06
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	43126.88	2.922731	8.684026	20.42137	.4805316	5.446644	660.7676
#1	43206.65	2.321058	9.111910	20.44952	.4812589	5.490748	662.6198
#2	43047.10	3.524405	8.256142	20.39321	.4798042	5.402540	658.9153
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	455.4453	15.14246	100.0134	208413.2	21.23075	901.7537	849.8178
#1	455.6535	15.11170	100.0997	208573.1	21.24982	900.7642	850.5671
#2	455.2371	15.17322	99.92702	208253.2	21.21169	902.7430	849.0683
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	857.9616	94.83995	690.5551	11.02487	.9657861	151.4552	-1.65362
#1	858.0421	94.28081	693.7393	11.94797	.7482419	134.5009	.9276752
#2	857.8812	95.39909	687.3709	10.10177	1.183330	168.4094	-4.23491
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	456.0489	113.7189	1.932600	3.621955	1.483479	9191.821	26.89386
#1	456.1273	113.9605	2.246540	4.017817	1.803317	9200.099	26.81207
#2	455.9706	113.4773	1.618661	3.226093	1.163642	9183.544	26.97565
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	18.39908	11.51577	10.77931	443.0568
#1	18.46858	10.28293	12.78037	443.0384
#2	18.32958	12.74861	8.778240	443.0752
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CVCCV3 Operator:
Run Time: 11/18/07 20:37:17
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	52292.23	521.9905	524.8311	498.8903	51.86391	503.6711	104866.0
#1	52438.05	521.8521	524.9058	499.8351	51.92968	504.5275	104957.3
#2	52146.42	522.1288	524.7563	497.9456	51.79815	502.8146	104774.7
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	515.0136	520.1792	531.6353	51683.95	512.0769	107997.1	521.3756
#1	515.3986	521.1419	533.2052	51753.10	512.4806	108150.7	522.2352
#2	514.6287	519.2165	530.0652	51614.81	511.6732	107843.6	520.5159
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	516.6108	502.7834	26332.59	537.0821	538.8945	101874.6	516.3012
#1	517.2455	503.2451	26419.29	539.3855	540.3485	102159.0	516.4274
#2	515.9761	502.3217	26245.90	534.7789	537.4406	101590.2	516.1749
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	527.4013	533.6688	537.2817	513.7378	534.8474	518.3966	508.9237
#1	527.9998	534.2393	538.4579	512.2296	536.0892	519.3801	510.8446
#2	526.8027	533.0983	536.1056	515.2460	533.6057	517.4131	507.0028
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	513.6534	535.5128	537.8668	529.8037
#1	513.2986	539.3471	539.4046	530.5039
#2	514.0082	531.6785	536.3290	529.1036
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/18/07 08:53:54 PM page 1

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/18/07 20:45:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-.044899	-1.68398	-4.25896	.1356140	-.104017	-.110107	185.8154
#1	-2.25875	-2.78443	-5.27377	.0635176	-.117202	-.361030	189.7260
#2	2.168956	-.583524	-3.24414	.2077104	-.090832	.1408148	181.9048
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.330515	-.138205	4.272501	3.794426	-1.10332	22.80840	.0611186
#1	-.816129	-.453636	3.926135	-6.69915	-1.60824	23.08827	.0348465
#2	.1550995	.1772261	4.618868	14.28800	-.598399	22.52854	.0873907
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-9.54875	-.013474	8.491847	.0436131	.1329993	-45.9164	4.845345
#1	-13.4928	-1.11540	-2.43723	-1.18824	-.351179	-239.381	5.071392
#2	-5.60468	1.088453	19.42092	1.275465	.6171780	147.5484	4.619299
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.116115	-.033067	.0428545	2.391349	-1.24818	.1603175	.0078297
#1	-.453118	-.148328	-.533565	2.865782	-1.94906	.0029666	-.313097
#2	.2208880	.0821954	.6192737	1.916915	-.547302	.3176684	.3287565
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.65901	1.492843	-.681113	-.108594
#1	-2.25593	.7755542	-2.17025	-.505214
#2	-1.06209	2.210132	.8080209	.2880270
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: SP710183-047-047-1/1 Operator:
Run Time: 11/18/07 20:54:00
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	64934.52	8.803463	19.84563	132.6286	5.897607	15.84739	1751.539
#1	64376.36	7.999828	19.44479	131.7180	5.826569	15.61549	1727.515
#2	65492.68	9.607097	20.24646	133.5392	5.968646	16.07928	1775.563
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	535.8226	70.54994	173.7412	223769.8	127.1790	2269.706	1006.694
#1	529.9277	69.62839	171.5729	221140.2	124.7003	2239.217	994.5063
#2	541.7175	71.47150	175.9095	226399.3	129.6576	2300.196	1018.882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1014.575	191.1048	2015.803	22.97240	11.81366	1291.972	9.226588
#1	1000.994	188.9204	2000.018	22.40874	11.40666	1309.847	7.308597
#2	1028.155	193.2892	2031.589	23.53605	12.22066	1274.096	11.14458
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	552.8959	241.3692	99.19357	45.80787	56.61917	10613.94	134.2670
#1	546.7102	238.5060	97.19947	45.32103	56.14181	10514.77	132.7929
#2	559.0815	244.2324	101.1877	46.29470	57.09654	10713.10	135.7411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	123.6348	22.41201	23.25248	537.5919
#1	120.6539	21.89935	22.66333	531.6551
#2	126.6158	22.92466	23.84163	543.5286
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SD710183-047-047-1/1 Operator:
Run Time: 11/18/07 21:02:21
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	66276.38	6.875142	17.63221	132.9015	5.842412	16.23344	1738.366
#1	66167.45	6.624561	15.74079	132.8480	5.823771	16.13299	1733.927
#2	66385.31	7.125723	19.52363	132.9551	5.861053	16.33389	1742.805
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	552.0435	70.22048	174.7354	226455.7	128.1913	2243.789	1017.213
#1	550.9386	69.92129	174.5593	226006.9	127.0723	2239.249	1015.115
#2	553.1484	70.51968	174.9114	226904.4	129.3103	2248.328	1019.310
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1021.866	191.9507	2052.673	20.52159	11.72748	1233.021	12.24363
#1	1022.003	193.0705	2046.267	19.84011	11.63492	1241.860	13.43067
#2	1021.729	190.8309	2059.079	21.20307	11.82005	1224.183	11.05659
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	554.5195	241.7470	99.28213	41.66679	54.15430	10328.48	133.0521
#1	553.6378	241.3267	98.85645	42.15687	53.80154	10312.34	132.5490
#2	555.4012	242.1674	99.70782	41.17670	54.50706	10344.62	133.5552
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	125.7608	20.58722	20.48867	538.6738
#1	124.3338	19.63002	19.94505	537.8741
#2	127.1878	21.54442	21.03230	539.4736
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: PS710183-047-047-1/1 Operator:
Run Time: 11/18/07 21:10:43
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	43881.07	87.93022	94.23401	40.86845	10.99366	25.85929	5926.450
#1	43901.27	87.53560	94.94679	40.84305	10.99543	25.74257	5941.199
#2	43860.87	88.32484	93.52124	40.89386	10.99189	25.97600	5911.701
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	470.6149	47.25385	131.3990	208378.1	101.6357	6415.377	925.6876
#1	471.3589	47.07323	131.3728	208754.2	103.1042	6429.145	927.2636
#2	469.8710	47.43447	131.4251	208002.0	100.1672	6401.608	924.1116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	933.6534	135.4804	6309.148	86.22395	45.92887	5285.960	103.2813
#1	933.5309	134.7377	6318.421	86.25347	46.33934	5252.491	103.0238
#2	933.7759	136.2232	6299.875	86.19443	45.51841	5319.429	103.5389
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	472.6513	197.3054	76.10045	35.07318	110.6573	9097.926	108.8759
#1	473.2848	197.5100	76.07150	35.02790	110.9405	9106.334	109.2782
#2	472.0178	197.1008	76.12940	35.11846	110.3740	9089.518	108.4735
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	98.01547	82.50459	88.08352	460.1198
#1	100.0170	82.49454	88.13283	460.6577
#2	96.01393	82.51465	88.03421	459.5819
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SE710183-047-047-1/1 Operator:
Run Time: 11/18/07 21:19:04
Comment: UG/L 50
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	8507.432	-.046781	-1.79828	4.054247	-.012496	.6169741	244.5050
#1	8553.357	-.571778	-2.41634	4.073175	-.010935	.5255952	247.8591
#2	8461.507	.4782167	-1.18023	4.035320	-.014056	.7083530	241.1508
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	89.49449	3.394484	21.87091	40824.37	3.560871	184.4843	165.5864
#1	90.20789	3.651318	22.09757	41210.37	4.508351	187.9047	167.1020
#2	88.78109	3.137649	21.64425	40438.36	2.613391	181.0639	164.0707
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	161.1963	18.92302	124.9754	1.338454	.5077180	-91.2225	2.140124
#1	161.0994	18.94761	130.8585	.4598436	.3854480	-54.3916	3.627003
#2	161.2932	18.89843	119.0924	2.217064	.6299881	-128.053	.6532457
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	88.52251	24.58807	.1626599	1.119226	-2.03451	1798.441	6.542648
#1	89.40475	24.70170	.0473725	1.149800	-1.90991	1814.846	6.354467
#2	87.64026	24.47444	.2779474	1.088653	-2.15911	1782.036	6.730829
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	2.069879	1.852015	1.081565	85.23985
#1	3.585186	-1.71696	1.548133	85.72109
#2	.5545716	5.420986	.6149969	84.75861
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

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Method: TRACEV2 Sample Name: S 710183-048-048-1/1 Operator:
Run Time: 11/18/07 21:27:25
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	47279.47	.6745791	4.467567	24.33476	.6044208	4.900853	744.1382
#1	47356.76	1.014425	5.029723	24.33479	.5691395	4.938475	745.1049
#2	47202.18	.3347330	3.905410	24.33472	.6397021	4.863232	743.1716
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	403.0039	11.35396	89.71404	214627.8	66.20180	1061.749	457.5676
#1	403.2272	11.06086	90.25461	214779.4	66.03172	1061.007	457.9139
#2	402.7806	11.64707	89.17348	214476.2	66.37189	1062.492	457.2212
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	477.2203	113.3414	637.0738	13.46044	1.115490	165.1997	.4171782
#1	476.1397	113.3809	638.9844	14.39506	1.195778	118.2802	1.995531
#2	478.3009	113.3019	635.1632	12.52582	1.035201	212.1193	-1.16117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	431.0596	106.1727	.8878827	3.367831	.8579330	9339.469	74.24580
#1	431.4607	106.0808	.7730093	3.439789	1.296117	9343.298	76.00314
#2	430.6585	106.2646	1.002756	3.295872	.4197488	9335.641	72.48846
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	62.17970	11.01962	14.68074	419.0324
#1	61.04591	12.89342	15.14578	419.1257
#2	63.31350	9.145819	14.21571	418.9391
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report 11/18/07 09:44:01 PM

Method: TRACEV2 Sample Name: S 710183-049-049-1/1 Operator:
Run Time: 11/18/07 21:35:46
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	29933.26	3.933707	3.742700	28.95592	.6315911	5.801612	1267.409
#1	29978.38	5.076498	3.110550	28.88759	.6392704	5.954040	1272.973
#2	29888.14	2.790916	4.374850	29.02425	.6239119	5.649183	1261.846
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	507.6053	19.82703	105.4766	258217.7	28.03917	1482.946	599.0018
#1	508.5175	19.94206	105.8392	258671.1	28.23502	1481.289	600.2609
#2	506.6933	19.71201	105.1141	257764.3	27.84332	1484.602	597.7427
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	623.2537	93.28937	847.9061	14.09418	.8457756	192.2436	1.127851
#1	622.3094	94.11408	851.8586	16.76167	.7253807	161.5608	1.480976
#2	624.1979	92.46465	843.9537	11.42670	.9661704	222.9264	.7747250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	592.3012	153.8620	-1.43502	3.789298	1.650384	13628.41	36.88899
#1	593.6331	154.3886	-1.61396	4.001895	1.513035	13644.91	37.68676
#2	590.9693	153.3354	-1.25609	3.576700	1.787734	13611.91	36.09123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	23.61414	12.01305	15.13464	573.5456
#1	23.50905	16.10330	17.09074	574.6841
#2	23.71924	7.922792	13.17855	572.4071
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report 11/18/07 09:52:22 PM

Method: TRACEV2 Sample Name: S 710183-050-050-1/1 Operator:
Run Time: 11/18/07 21:44:07
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	52667.69	2.928126	4.007511	23.40175	.5031264	4.042796	667.6393
#1	52628.29	1.626258	3.666202	23.39308	.4714014	3.948997	666.0111
#2	52707.10	4.229995	4.348820	23.41042	.5348515	4.136595	669.2675
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	417.0545	12.50629	77.17773	201615.6	15.97481	892.6577	556.5955
#1	416.4460	12.39369	77.10139	201281.5	15.63587	892.3711	555.8000
#2	417.6629	12.61889	77.25407	201949.7	16.31375	892.9444	557.3910
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	572.1777	120.6318	550.5385	14.45868	.5548219	125.6835	3.784638
#1	572.9927	120.6488	547.9674	15.08790	.1673596	77.92853	-2.55395
#2	571.3627	120.6147	553.1095	13.82946	.9422842	173.4385	10.12322
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	453.6422	98.00583	-1.08522	3.641439	1.597983	10025.21	22.02760
#1	453.0312	97.84005	-1.19828	3.078347	1.171171	10011.65	21.75632
#2	454.2530	98.17162	-.972169	4.204530	2.024795	10038.78	22.29888
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	12.94830	11.13660	16.11961	439.5976
#1	12.57553	11.78060	16.74144	438.8475
#2	13.32107	10.49260	15.49778	440.3478
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report 11/18/07 10:00:43 PM

Method: TRACEV2 Sample Name: S 710183-051-051-1/1 Operator:
Run Time: 11/18/07 21:52:27
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	24182.84	6.655282	4.467797	26.48701	.6383707	6.666203	562.7291
#1	24148.34	5.775767	5.457838	26.52618	.6422353	6.445709	553.0465
#2	24217.35	7.534797	3.477757	26.44783	.6345063	6.886698	572.4117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	596.1660	26.34128	91.25614	278396.9	23.51397	1583.351	804.8547
#1	595.4172	26.37946	90.74947	277200.2	24.10625	1581.896	801.5225
#2	596.9149	26.30311	91.76281	279593.6	22.92169	1584.807	808.1869
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	828.7677	87.70062	394.2401	13.01143	1.142520	188.4706	-2.81985
#1	825.7848	87.81517	397.7319	12.21106	1.499938	272.5804	-1.62716
#2	831.7507	87.58607	390.7483	13.81179	.7851013	104.3608	-4.01254
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	757.3647	183.1243	-2.88010	4.004543	2.942822	16876.98	36.98566
#1	754.5505	182.4212	-2.56825	3.783515	3.489061	16845.28	39.80820
#2	760.1790	183.8273	-3.19194	4.225572	2.396583	16908.67	34.16312
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	16.77801	12.94645	13.04381	730.8640
#1	16.25518	13.19570	11.71864	728.2214
#2	17.30085	12.69720	14.36898	733.5065
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-052-052-1/1 Operator:
Run Time: 11/18/07 22:00:48
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	41322.47	1.642567	5.216131	37.41414	.5237075	3.970692	1096.274
#1	41302.13	.1060181	4.798189	37.40596	.5121052	3.867063	1097.830
#2	41342.81	3.179116	5.634073	37.42231	.5353097	4.074320	1094.719
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	375.0323	12.68610	75.86215	198205.8	19.97893	1187.306	461.8263
#1	375.2248	12.64618	75.91430	198243.0	19.79538	1188.414	462.3699
#2	374.8397	12.72601	75.81000	198168.5	20.16249	1186.198	461.2826
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	480.4222	96.58961	645.2799	8.407554	.8608387	113.5634	1.028409
#1	479.6374	96.64632	644.0757	7.343355	.9492319	110.1765	-1.79069
#2	481.2071	96.53291	646.4841	9.471752	.7724454	116.9504	3.847508
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	455.4108	107.2387	.2571092	3.409897	.7828574	10269.70	28.34720
#1	455.2644	107.2184	.4896793	3.721146	1.337622	10272.81	28.35780
#2	455.5571	107.2591	.0245390	3.098648	.2280927	10266.59	28.33660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	15.79468	6.884318	9.169064	441.0844
#1	15.51405	8.838676	6.595589	441.1014
#2	16.07531	4.929960	11.74254	441.0674
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-053-053-1/1 Operator:
Run Time: 11/18/07 22:09:10
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	113891.8	-.567005	1.326552	4.943852	.1080603	.6547387	295.7266
#1	113970.9	-.882112	1.637890	4.973564	.1206063	.5763521	293.9622
#2	113812.6	-.251899	1.015214	4.914139	.0955143	.7331252	297.4910
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	158.8880	2.787460	69.45129	38389.56	10.35946	223.9765	63.18356
#1	158.9955	2.672601	69.51521	38414.01	9.500998	223.9234	63.21212
#2	158.7805	2.902318	69.38736	38365.09	11.21793	224.0295	63.15501
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	62.30321	84.82498	82.28503	6.597961	.5945636	255.3695	.2569215
#1	61.79657	85.21403	84.25302	7.792382	.9313406	240.8942	-.574184
#2	62.80985	84.43593	80.31705	5.403541	.2577866	269.8447	1.088027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	90.28625	18.77081	4.810408	1.089684	2.725320	2253.689	12.97024
#1	90.28992	18.68606	4.485834	1.131552	1.813800	2254.953	13.48154
#2	90.28260	18.85556	5.134982	1.047816	3.636841	2252.425	12.45894
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	9.053968	3.955168	7.919248	87.36357
#1	7.510620	4.504826	9.436049	87.36848
#2	10.59732	3.405510	6.402447	87.35867
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CVCCV3 Operator:
Run Time: 11/18/07 22:20:21
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	52356.95	528.1812	533.8184	498.2690	52.83356	510.5494	106714.7
#1	52627.99	531.7208	535.2136	501.1345	53.08773	513.3119	107094.7
#2	52085.92	524.6416	532.4232	495.4036	52.57939	507.7870	106334.7
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	521.5841	530.5670	536.7999	52638.92	519.6090	109846.3	529.4635
#1	523.3075	532.9907	539.5017	52878.72	522.7422	Q110271.1	531.6314
#2	519.8606	528.1434	534.0981	52399.11	516.4758	109421.4	527.2956
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	522.6178	509.4796	26570.52	547.9639	545.9996	101972.2	522.4822
#1	527.3632	510.9687	26684.62	Q553.0466	548.4495	102350.4	522.2256
#2	517.8724	507.9905	26456.41	542.8810	543.5496	101594.1	522.7388
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	535.3886	542.4066	543.8737	521.3765	549.7748	518.7061	514.5166
#1	537.2097	544.2658	545.3397	523.3641	Q550.7641	521.2522	515.5448
#2	533.5675	540.5476	542.4078	519.3887	548.7856	516.1599	513.4884
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	522.1562	539.5496	552.1709	538.4431
#1	526.3420	544.5161	557.3118	540.3639
#2	517.9706	534.5830	547.0300	536.5224
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/18/07 22:28:42
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	4.660421	-1.99024	-2.08530	.1004740	-.093059	-.128128	196.3770
#1	8.673933	-3.25783	-.192429	.1205893	-.093895	-.082155	197.2786
#2	.6469097	-.722656	-3.97817	.0803587	-.092224	-.174102	195.4754
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.149407	-.126185	4.024385	5.280687	-1.07270	26.03340	.0477063
#1	-.082168	.0894056	3.911582	10.02407	.4703536	31.76690	.0840650
#2	-.216646	-.341776	4.137187	.5373048	-2.61575	20.29989	.0113476
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-10.0290	.7420873	15.05992	-.484571	.6023523	119.7449	2.960122
#1	-8.52714	1.228754	17.25959	-.673135	.6124224	130.8180	5.401348
#2	-11.5309	.2554206	12.86025	-.296006	.5922821	108.6718	.5188964
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2743578	-.064903	-.136865	1.723073	-1.02880	.1368971	-.188157
#1	.6108387	.0160350	.5810758	2.043658	-.868163	.2018999	.1502622
#2	-.062123	-.145841	-.854806	1.402488	-1.18943	.0718944	-.526577
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.51508	1.247029	-1.35048	-.021537
#1	.6302880	1.500683	-1.76015	.0789563
#2	-3.66045	.9933757	-.940807	-.122030
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: S 710183-054-054-1/1 Operator:
Run Time: 11/18/07 22:37:04
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	63269.15	5.272634	3.947693	26.89631	.5984106	5.313168	844.6016
#1	63064.96	5.258013	2.946948	26.82014	.5825031	5.105955	834.6873
#2	63473.34	5.287253	4.948438	26.97247	.6143182	5.520380	854.5159
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	365.4543	17.13713	67.35133	217863.0	33.43992	2726.176	506.6621
#1	363.4527	16.83327	66.90009	216489.4	33.13929	2710.981	503.3309
#2	367.4560	17.44099	67.80256	219236.6	33.74054	2741.371	509.9932
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	523.7631	92.64365	553.2346	20.73488	.5622336	142.9710	-.592420
#1	521.3979	93.19019	549.0766	19.17236	.6739601	172.4964	-.723923
#2	526.1283	92.09711	557.3927	22.29740	.4505070	113.4457	-.460917
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	531.9639	105.0073	.1620755	5.218026	.9427426	12660.04	42.70554
#1	528.4422	104.1929	-.437915	5.336868	.2951822	12608.27	42.31340
#2	535.4857	105.8216	.7620659	5.099183	1.590303	12711.82	43.09768
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	28.80701	21.16746	20.51848	514.3741
#1	28.55214	21.28277	18.11704	511.1087
#2	29.06187	21.05215	22.91992	517.6395
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-055-055-1/1 Operator:
Run Time: 11/18/07 22:45:25
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	40041.02	3.006179	2.309830	41.51166	.3799015	4.380141	1016.763
#1	40053.28	2.883248	2.874087	41.42932	.3931202	4.563099	1030.496
#2	40028.75	3.129110	1.745573	41.59399	.3666827	4.197184	1003.030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	522.1254	33.36107	170.3154	185049.5	10.45950	1670.187	1955.281
#1	522.5488	33.23734	170.9743	185806.7	11.20718	1677.211	1963.997
#2	521.7019	33.48479	169.6564	184292.3	9.711819	1663.162	1946.565
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1946.831	137.2399	905.1791	9.326860	.8530693	262.5992	1.306372
#1	1952.457	137.0927	905.7283	9.508424	.5130164	250.3266	1.562599
#2	1941.205	137.3871	904.6299	9.145296	1.193122	274.8717	1.050144
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	467.0307	125.7657	.1734667	2.138501	1.722633	9888.806	17.87709
#1	469.1383	126.1863	.2542739	2.073823	1.618502	9906.392	17.15304
#2	464.9232	125.3451	.0926595	2.203179	1.826764	9871.220	18.60114
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	6.750587	5.212703	11.38382	451.4004
#1	8.234134	3.095621	12.71471	453.2622
#2	5.267041	7.329785	10.05294	449.5386
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-056-056-1/1 Operator:
Run Time: 11/18/07 22:53:46
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	61125.15	1.016150	.0058801	32.74126	.3244618	3.480208	987.4772
#1	60865.73	1.127367	-.527202	32.68286	.3361749	3.511431	989.3848
#2	61384.56	.9049325	.5389624	32.79966	.3127487	3.448986	985.5695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	447.4366	51.32169	158.8658	147492.4	8.058758	1373.661	3940.838
#1	446.7545	51.31478	158.8963	147231.5	9.233976	1375.088	3933.837
#2	448.1189	51.32860	158.8354	147753.4	6.883540	1372.234	3947.839
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	3909.973	176.6611	1030.544	7.369810	.5000781	163.4122	-.627705
#1	3901.897	175.4824	1029.314	7.281221	.4677408	153.3398	-.314552
#2	3918.048	177.8397	1031.773	7.458398	.5324155	173.4846	-.940857
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	349.4001	104.9321	.7878186	1.818137	.7254264	7492.796	15.38572
#1	349.0661	104.7635	.5108235	1.076571	1.220329	7472.801	15.28931
#2	349.7342	105.1007	1.064814	2.559703	.2305236	7512.792	15.48213
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	4.395173	4.677352	8.715926	338.5179
#1	6.206203	5.648215	8.097612	338.1277
#2	2.584143	3.706489	9.334240	338.9080
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report 11/18/07 11:10:23 PM

Method: TRACEV2 Sample Name: S 710179-001-001-1/1 Operator:
Run Time: 11/18/07 23:02:08
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	12327.98	-1.75435	3.089952	31.26514	.2657387	.3419754	659.0350
#1	13878.90	-2.42892	4.173191	35.31389	.3242174	.4530907	722.4218
#2	10777.06	-1.07978	2.006712	27.21640	.2072599	.2308601	595.6482
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	28.00654	3.816228	7.993250	17158.83	13.39631	652.2473	153.9694
#1	31.70221	4.291968	8.550429	19330.72	15.16176	732.7563	173.7382
#2	24.31086	3.340489	7.436070	14986.94	11.63085	571.7383	134.2007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	145.6043	4.859595	333.5894	1.233829	.1981326	59.90865	3.809046
#1	165.4872	5.028934	381.4935	1.388524	.5074514	78.30250	3.782460
#2	125.7213	4.690257	285.6853	1.079133	-.111186	41.51481	3.835633
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	33.88095	24.46281	1.422699	1.098742	-.116722	86.58431	10.52932
#1	38.49536	27.20176	1.398444	1.305476	-.430713	98.11909	13.39965
#2	29.26654	21.72386	1.446953	.8920081	.1972698	75.04952	7.658991
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	14.82968	-.264051	1.982656	32.43339
#1	16.04271	.8260932	1.669628	36.86536
#2	13.61666	-1.35420	2.295683	28.00141
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710179-002-002-1/1 Operator:
Run Time: 11/18/07 23:10:29
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	8920.113	-.111702	2.004355	26.50069	.3303777	.3782431	806.8269
#1	9312.899	-2.34554	.9461141	27.75622	.3571114	.4078231	840.7663
#2	8527.328	2.122138	3.062596	25.24517	.3036440	.3486631	772.8876
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	33.76524	7.277467	7.038862	26586.00	18.43877	631.9558	377.7850
#1	35.56669	7.457108	7.253550	27840.97	19.83207	664.8607	395.7932
#2	31.96379	7.097825	6.824175	25331.02	17.04548	599.0509	359.7769
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	362.9089	4.475473	172.1718	1.199642	.3630092	87.90692	1.772954
#1	382.5697	4.914963	185.6414	2.341530	.3281369	150.9446	1.803500
#2	343.2480	4.035981	158.7022	.0577540	.3978814	24.86927	1.742409
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	35.90509	29.16388	.6356000	1.065141	2.679797	41.10194	19.51851
#1	37.89790	30.49992	.7878857	1.381971	4.016532	43.02734	18.40103
#2	33.91227	27.82784	.4833142	.7483122	1.343062	39.17655	20.63598
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	17.89880	.5991626	1.499770	34.97877
#1	20.54748	-4.19888	5.611617	36.58753
#2	15.25012	5.397201	-2.61208	33.37001
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710199-001-001-1/1 Operator:
Run Time: 11/18/07 23:18:51
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	66636.08	-.068567	3.003799	22.89845	.2950872	3.835815	1420.349
#1	68492.80	-1.44845	3.800891	23.44387	.3326499	4.160755	1468.101
#2	64779.34	1.311318	2.206708	22.35302	.2575245	3.510874	1372.596
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	520.1130	10.87191	111.4100	152039.8	21.13992	1298.761	711.9119
#1	534.3535	11.03780	115.1123	156599.5	21.53448	1338.182	734.0236
#2	505.8726	10.70603	107.7078	147480.1	20.74536	1259.339	689.8002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	714.5230	181.5057	804.0956	11.59736	.7822170	48.33828	-1.73698
#1	737.6480	186.8421	830.5828	10.84854	.5890247	-34.1898	-1.29380
#2	691.3979	176.1694	777.6085	12.34620	.9754094	130.8664	-2.18015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	331.8375	89.85323	1.499321	1.543828	.1075494	6989.875	26.28080
#1	341.3841	92.56905	.3800011	1.885016	-1.06166	7178.393	24.79481
#2	322.2909	87.13741	2.618640	1.202640	1.276763	6801.357	27.76679
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	18.56937	6.854350	13.96876	320.7853
#1	19.90419	3.126299	14.70953	328.6472
#2	17.23454	10.58240	13.22798	312.9233
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710199-002-002-1/1 Operator:
Run Time: 11/18/07 23:27:12
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	55983.24	-3.66948	3.804932	12.99781	.3254829	3.590809	736.3633
#1	61526.02	-6.36825	5.332922	14.42899	.3896126	4.186457	793.7561
#2	50440.45	-.970705	2.276942	11.56663	.2613532	2.995161	678.9706
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	484.9207	9.823320	126.3916	146042.8	23.27882	1023.934	557.1232
#1	532.2994	10.65976	139.2669	160430.0	27.03488	1129.154	613.5261
#2	437.5421	8.986881	113.5165	131655.7	19.52277	918.7142	500.7203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	561.9492	152.1911	518.6578	8.939539	.6777004	143.0038	6.285244
#1	620.3412	167.7696	576.2582	8.634807	.7869726	115.8114	14.57167
#2	503.5571	136.6125	461.0575	9.244270	.5684282	170.1962	-2.00118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	329.1631	108.9193	-1.26700	.9952927	-1.21273	6905.503	24.14049
#1	361.7606	119.6365	-2.36372	.2289789	-3.98726	7588.842	23.52319
#2	296.5657	98.20212	-.170270	1.761607	1.561792	6222.165	24.75779
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	22.84787	3.256666	11.78086	316.2657
#1	28.79059	-3.41373	14.65896	345.9567
#2	16.90516	9.927063	8.902765	286.5747
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710199-003-003-1/1 Operator:
Run Time: 11/18/07 23:35:33
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	33476.12	1.185138	4.479242	60.00047	.5708132	6.078353	4824.994
#1	35381.09	-.831195	4.440451	63.50388	.6568725	7.044331	5114.583
#2	31571.15	3.201471	4.518033	56.49706	.4847539	5.112375	4535.405
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	570.5308	25.69985	160.1410	221069.6	25.36941	2352.858	1795.283
#1	602.3883	26.82771	170.7337	234101.1	27.89117	2505.110	1906.000
#2	538.6732	24.57198	149.5482	208038.1	22.84764	2200.606	1684.565
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1801.631	128.4579	1052.561	13.65095	.8878313	-54.5776	7.399372
#1	1911.798	136.4219	1124.197	13.93515	.8668032	-233.213	14.10844
#2	1691.464	120.4939	980.9246	13.36674	.9088595	124.0581	.6903076
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	562.0380	163.4174	.6169029	2.451802	-2.64626	12358.90	28.46297
#1	596.0598	173.6860	-2.42133	1.452890	-4.42040	13089.05	26.83731
#2	528.0162	153.1488	3.655133	3.450714	-.872110	11628.75	30.08862
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	23.82251	6.124183	17.41422	537.4336
#1	28.41797	.6933856	20.55592	565.6077
#2	19.22705	11.55498	14.27251	509.2595
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710199-004-004-1/1 Operator:
Run Time: 11/18/07 23:43:55
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	79477.28	-2.33595	8.997398	359.6932	.9477009	6.705480	2698.628
#1	89734.03	-5.56751	13.10113	407.0090	1.115507	7.884129	3024.604
#2	69220.52	.8956156	4.893662	312.3774	.7798948	5.526832	2372.652
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	403.6909	123.3415	383.8313	136068.9	78.12566	3602.496	H15678.39
#1	455.4272	139.4987	433.6070	153590.6	89.19923	4078.881	H17616.83
#2	351.9545	107.1843	334.0556	118547.2	67.05209	3126.112	H13739.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	16100.27	472.9461	1875.893	6.053699	1.373944	212.0071	14.94054
#1	18198.45	535.1616	2117.319	8.193909	1.601078	164.4964	32.25664
#2	14002.08	410.7307	1634.468	3.913491	1.146810	259.5178	-2.37557
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	320.6115	390.9012	1.312387	1.347103	-3.66924	7557.714	76.32865
#1	362.1294	440.8359	.3671646	.4992710	-5.17872	8537.353	78.79945
#2	279.0936	340.9665	2.257609	2.194936	-2.15975	6578.076	73.85786
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	79.02405	-4.01479	11.08783	306.5935
#1	94.39901	-12.4266	18.50404	344.7357
#2	63.64909	4.397018	3.671617	268.4513
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710199-005-005-1/1 Operator:
Run Time: 11/18/07 23:52:16
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	77444.80	-3.61408	9.531036	321.6575	.6071769	5.776045	3671.879
#1	82874.99	-10.0640	12.33254	345.6962	.7104301	6.523351	3932.518
#2	72014.62	2.835842	6.729538	297.6188	.5039236	5.028740	3411.240
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	308.1623	124.5353	357.1009	125315.5	45.08040	2504.496	H18452.65
#1	328.8400	133.0411	383.7279	134281.5	50.42403	2695.733	H19747.94
#2	287.4846	116.0295	330.4738	116349.5	39.73677	2313.260	H17157.35
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	19026.74	376.9575	2284.637	6.105175	.9995069	187.2109	5.880943
#1	20436.24	405.6875	2473.808	7.066341	.8613157	125.5670	17.47139
#2	17617.24	348.2274	2095.465	5.144009	1.137698	248.8548	-5.70950
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	287.9384	365.8372	4.001574	1.393903	-1.38113	6666.073	42.62631
#1	308.9699	392.1321	2.968533	.1030675	-5.54391	7142.733	40.43485
#2	266.9069	339.5423	5.034616	2.684739	2.781659	6189.413	44.81777
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	46.30734	-1.14506	9.730175	274.9793
#1	55.41851	-11.5829	16.39085	291.8601
#2	37.19616	9.292820	3.069496	258.0985
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

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Method: TRACEV2 Sample Name: CVCCV4 Operator:
Run Time: 11/19/07 00:03:28
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	53222.38	534.4531	537.9995	507.4473	53.45587	516.1022	108082.4
#1	53416.61	537.0519	542.1742	509.4058	53.75181	518.3630	108590.9
#2	53028.16	531.8544	533.8249	505.4887	53.15993	513.8414	107573.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	528.6852	536.2555	542.7150	53220.78	527.0362	Q111053.8	539.6303
#1	532.0106	539.1556	545.3460	53504.44	528.7349	Q111542.3	542.6680
#2	525.3597	533.3554	540.0841	52937.12	525.3376	Q110565.3	536.5926
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	527.6792	514.5938	26857.27	Q551.5992	Q554.4324	103645.7	526.5771
#1	531.9364	516.6414	26902.36	Q554.7787	Q556.9840	103743.0	527.8300
#2	523.4220	512.5463	26812.18	548.4197	Q551.8807	103548.5	525.3242
Errors	NOCHECK	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	543.1375	549.2355	549.2832	529.5638	Q553.0563	526.6470	521.1591
#1	545.6471	Q551.6992	Q551.4102	530.2905	Q557.1529	529.0122	522.3732
#2	540.6279	546.7718	547.1563	528.8372	548.9596	524.2817	519.9451
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	529.9753	543.3020	555.7478	545.8070
#1	531.9168	543.1157	560.6101	548.3312
#2	528.0338	543.4883	550.8854	543.2828
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/19/07 00:20:06 AM page 1

Method: TRACEV2 Sample Name: BCCCB4 Operator:
Run Time: 11/19/07 00:11:50
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	9.862704	-.349883	-.557222	.2315091	-.063474	.0923371	223.1240
#1	14.38863	-.002849	-1.59137	.2329126	-.079818	-.025982	247.7022
#2	5.336782	-.696917	.4769300	.2301055	-.047130	.2106559	198.5457
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.1804231	.2165747	4.980676	15.46756	-.681185	38.48254	.5098237
#1	.2360503	.0286281	5.315167	16.12691	-.531171	50.36321	.6281968
#2	.1247959	.4045213	4.646185	14.80822	-.831200	26.60186	.3914505
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-10.1836	.9589515	16.39710	-.211104	.7385634	95.21960	6.378879
#1	-14.2183	1.020885	22.81070	.5561922	.7557088	99.48505	6.891718
#2	-6.14876	.8970183	9.983483	-.978401	.7214181	90.95417	5.866040
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2865501	.1888979	.2178395	2.250367	.3642437	.3608491	.3204992
#1	.2900526	.3514637	.4597631	2.902852	.2070462	.4350474	.7404574
#2	.2830474	.0263322	-.024084	1.597882	.5214413	.2866508	-.099459
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.18214	2.849305	-1.74142	.1353570
#1	-1.16710	4.147714	-1.23968	.3721250
#2	-1.19718	1.550895	-2.24316	-.101411
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: S 710199-006-006-1/1 Operator:
Run Time: 11/19/07 00:20:12
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	75660.01	-8.48042	10.86183	511.0517	.8383363	4.055816	2383.459
#1	85588.77	-14.5372	15.05115	578.7781	1.037886	5.286488	2727.115
#2	65731.24	-2.42363	6.672505	443.3252	.6387869	2.825144	2039.803
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	238.1281	127.1845	338.8512	102151.1	16.79497	2147.982	H28519.68
#1	270.4942	145.4026	388.3014	116677.0	20.14915	2475.030	H32387.78
#2	205.7620	108.9663	289.4011	87625.20	13.44078	1820.935	H24651.57
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	30352.08	461.0392	2365.927	3.152472	-.626574	195.8916	22.86993
#1	34709.16	524.4439	2735.130	5.968153	-.668593	-.449317	47.67600
#2	25995.01	397.6344	1996.724	.3367910	-.584555	392.2325	-1.93613
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	234.6490	348.1559	1.789270	.8842549	-5.68958	5030.489	12.29421
#1	268.5743	397.9452	1.230417	-.107066	-11.1166	5715.861	7.074142
#2	200.7236	298.3667	2.348124	1.875576	-.262549	4345.117	17.51428
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	19.04525	-11.8192	10.63821	222.0461
#1	26.68650	-20.6259	19.26508	250.4450
#2	11.40401	-3.01253	2.011342	193.6472
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710199-007-007-1/1 Operator:
Run Time: 11/19/07 00:28:33
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	70992.51	-2.01725	10.92686	322.3008	.6423466	4.429912	2670.212
#1	78213.03	-3.60541	14.15344	355.1868	.7575268	5.263934	2935.544
#2	63771.98	-.429087	7.700272	289.4148	.5271664	3.595889	2404.880
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	256.9780	117.2001	282.9531	109006.0	29.68709	2079.780	H22377.58
#1	283.0965	129.1179	313.0405	120416.5	33.15394	2302.366	H24582.14
#2	230.8595	105.2824	252.8657	97595.55	26.22023	1857.195	H20173.02
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	23259.43	379.6150	1209.516	5.262034	.3703839	194.5602	7.109367
#1	25686.53	419.1279	1335.487	5.639389	.6364033	144.4417	19.25793
#2	20832.33	340.1022	1083.545	4.884680	.1043644	244.6787	-5.03920
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	251.5763	320.3384	2.502388	.8642187	-1.90605	5672.969	31.06615
#1	277.8858	353.0272	1.724165	.5380167	-4.41388	6254.690	30.36530
#2	225.2667	287.6495	3.280612	1.190421	.6017864	5091.248	31.76700
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	28.99745	-.563721	8.174799	240.9527
#1	34.54816	-7.87835	12.39814	264.6624
#2	23.44674	6.750913	3.951456	217.2431
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710199-008-008-1/1 Operator:
Run Time: 11/19/07 00:36:55
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	67653.31	-2.19524	8.958868	196.9040	.4132786	3.823118	2590.721
#1	71797.96	-6.72676	11.87476	209.7148	.4903971	4.225179	2736.349
#2	63508.67	2.336284	6.042976	184.0932	.3361600	3.421058	2445.094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	333.1149	87.05265	251.5511	128838.8	38.75949	1963.116	H12090.21
#1	352.7878	91.79476	267.6957	136461.8	42.36868	2088.487	H12796.26
#2	313.4420	82.31054	235.4065	121215.9	35.15030	1837.745	H11384.16
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	12229.45	310.6670	1470.918	3.653042	.7786307	171.0692	10.18600
#1	12987.24	330.4778	1566.091	3.891911	.6854211	107.9509	20.85422
#2	11471.67	290.8561	1375.744	3.414173	.8718404	234.1875	-.482231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	300.7156	222.4830	2.641544	1.797627	-.178708	6580.543	38.12789
#1	319.1020	235.7291	.9022059	.9029863	-1.59355	6982.968	36.80733
#2	282.3292	209.2369	4.380881	2.692268	1.236136	6178.119	39.44846
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	39.07519	-4.97341	7.966154	288.0494
#1	45.14925	-10.7782	11.22684	302.7106
#2	33.00112	.8313600	4.705469	273.3882
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BLK 039 Operator:
Run Time: 11/19/07 00:48:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	15.24351	1.399788	-.863107	.3118265	-.083283	.0209491	178.2802
#1	16.75476	.5335640	-.248851	.2970048	-.087368	-.031960	177.7323
#2	13.73225	2.266013	-1.47736	.3266482	-.079198	.0738580	178.8281
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	1.601264	-1.40659	3.449554	59.91582	1.066030	12.97493	2.106117
#1	1.662070	-1.53207	3.524053	62.81985	.5715375	12.35997	H2.610874
#2	1.540458	-1.28110	3.375055	57.01179	1.560523	13.58989	1.601360
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-5.27022	-1.17331	31.12988	1.431568	.6317742	622.5592	-2.50654
#1	-4.15624	-.900635	34.52099	1.852471	.8092412	561.4836	-2.25986
#2	-6.38421	-1.44598	27.73877	1.010664	.4543073	683.6348	-2.75321
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.3294843	3.911113	.2150570	.4431682	H26.42339	4.542545	8.401735
#1	.2748018	3.980128	.2466975	.3012386	H26.22664	4.744397	7.466224
#2	.3841668	3.842098	.1834164	.5850979	H26.62015	4.340693	9.337247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-2.60193	-11.7729	8.033699	.2820938
#1	-2.87591	-12.6420	9.099581	.3041213
#2	-2.32794	-10.9039	6.967817	.2600663
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BKS 039 Operator:
Run Time: 11/19/07 00:56:28
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10129.54	101.6333	98.59180	1012.941	52.35989	103.2619	10437.09
#1	10149.98	100.3475	98.61233	1012.374	52.38829	103.1755	10463.45
#2	10109.10	102.9192	98.57126	1013.509	52.33148	103.3484	10410.72
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	530.4760	519.9426	534.7502	10330.47	1018.055	10466.77	1062.000
#1	531.7856	520.8687	536.4751	10355.32	1016.531	10494.96	1064.340
#2	529.1663	519.0165	533.0253	10305.61	1019.579	10438.57	1059.660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1035.139	511.3074	10137.19	95.81027	105.3175	10262.23	96.61839
#1	1035.290	511.7070	10191.36	94.69096	105.6934	10297.96	96.10664
#2	1034.987	510.9078	10083.02	96.92958	104.9416	10226.49	97.13013
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	541.2452	1048.272	990.6269	517.9570	558.8036	2040.476	1016.043
#1	542.4814	1051.211	992.2093	517.5143	560.9448	2042.858	1014.644
#2	540.0091	1045.332	989.0446	518.3997	556.6625	2038.093	1017.441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1019.061	81.85023	102.7903	540.4729
#1	1017.474	80.86306	101.6049	541.9832
#2	1020.647	82.83740	103.9757	538.9626
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-039-039-1/1 Operator:
Run Time: 11/19/07 01:04:49
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	61709.91	.3950424	15.55106	121.9673	.5632512	4.581173	3606.240
#1	63117.52	.5150719	14.36536	125.2008	.6130230	4.996540	3693.637
#2	60302.30	.2750130	16.73676	118.7338	.5134794	4.165806	3518.842
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	373.2047	52.02776	187.5899	194437.9	103.9944	1670.550	7119.335
#1	381.8967	53.10287	192.3013	198992.3	106.9120	1718.277	7290.792
#2	364.5126	50.95266	182.8785	189883.5	101.0768	1622.823	6947.878
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7106.774	112.7331	1266.158	9.392668	.1972584	87.18298	1.599615
#1	7289.154	115.8010	1302.481	9.858153	.3422187	-91.9519	8.331001
#2	6924.394	109.6651	1229.836	8.927181	.0522981	266.3179	-5.13177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	431.5989	185.5462	2.597210	4.015539	33.91450	7793.130	102.6493
#1	442.0202	190.1197	1.550430	4.085236	34.50616	7976.118	101.6529
#2	421.1776	180.9727	3.643990	3.945842	33.32284	7610.143	103.6458
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	104.6668	1.493641	13.34207	415.6965
#1	109.5415	-3.22372	16.39897	422.9576
#2	99.79218	6.210999	10.28516	408.4354
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CRCRI Operator:
Run Time: 11/19/07 01:16:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	413.8016	125.1998	18.06271	414.3877	10.36184	10.56909	Q677.8672
#1	413.1619	124.5810	17.68389	413.5521	10.40901	10.66634	Q686.3278
#2	414.4413	125.8185	18.44152	415.2233	10.31467	10.47185	Q669.4065
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	500.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	20.63046	112.7129	55.02391	233.7925	5.209510	561.0869	32.27589
#1	20.71361	113.2783	55.24232	239.0028	6.477210	562.9988	32.60529
#2	20.54731	112.1474	54.80550	228.5821	Q3.941810	559.1749	31.94648
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	23.65052	85.39073	525.1462	9.129931	21.40008	1080.689	20.78153
#1	23.09403	85.79129	528.6113	8.968877	21.41426	1111.754	20.85750
#2	24.20702	84.99018	521.6811	9.290985	21.38591	1049.624	20.70557
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		80.00000	500.0000	10.00000	20.00000	1000.000	20.00000
Range		25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	110.9337	45.28798	15.75642	5.206307	28.11008	27.35498	4.952115
#1	111.4254	45.36521	16.09053	5.048419	29.93820	27.62675	5.049254
#2	110.4420	45.21074	15.42231	5.364196	26.28196	27.08321	4.854976
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	100.0000	40.00000	15.00000	5.000000	25.00000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	5.338097	13.82951	6.780036	105.0965
#1	7.191076	15.19010	5.858159	105.4485
#2	3.485118	12.46892	7.701913	104.7444
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IAICSA Operator:
Run Time: 11/19/07 01:24:24
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	498236.3	4.257744	-2.00882	1.290975	-.237764	Q7.029112	529979.4
#1	501729.6	5.408504	-4.32970	1.334317	-.230374	Q7.061846	534170.2
#2	494743.0	3.106985	.3120517	1.247633	-.245154	Q6.996378	525788.4
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1.972847	2.954848	3.877656	198987.9	-.361223	527026.1	Q7.280414
#1	2.425814	3.063556	4.117835	200426.8	.0259186	530516.2	Q7.465603
#2	1.519880	2.846139	3.637477	197549.0	-.748364	523536.0	Q7.095225
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	49.70351	3.993124	27.57041	6.507042	.6925035	-299.635	-4.22752
#1	52.80485	4.558465	28.93326	8.017955	.5636632	-283.990	-4.21477
#2	46.60216	3.427783	26.20756	4.996129	.8213438	-315.280	-4.24026
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.3516188	2.612896	3.801416	1.648436	-1.41120	12.64763	-.126701
#1	.3748722	2.685377	4.018522	1.921439	1.471327	12.83876	-4.75021
#2	.3283653	2.540415	3.584310	1.375433	-4.29372	12.45651	4.496811
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.478600	1.481224	9.019831	10.64437
#1	2.413864	-4.30267	14.17814	10.92749
#2	-3.37106	7.265122	3.861519	10.36124
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IBICSAB Operator:
Run Time: 11/19/07 01:32:47
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	495551.4	623.2653	105.8810	500.8934	501.8254	951.4763	529583.9
#1	497274.8	624.2735	104.1800	503.0838	505.2701	957.4081	533604.8
#2	493828.0	622.2571	107.5820	498.7030	498.3807	945.5445	525563.1
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	498.0831	493.5250	546.4056	199721.6	46.30392	530146.9	519.1754
#1	501.1723	497.2776	549.2871	201054.0	46.36796	533176.2	522.4332
#2	494.9938	489.7725	543.5241	198389.2	46.23988	527117.7	515.9176
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	536.6016	944.9027	Q6125.997	59.32797	221.5153	10620.33	91.72659
#1	539.5389	950.0358	Q6139.028	61.71967	222.2140	10654.30	90.10761
#2	533.6642	939.7696	Q6112.967	56.93628	220.8166	10586.37	93.34558
Errors	NOCHECK	QC Pass	QC Fail	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	516.6138	1047.766	1091.886	1013.365	1060.307	1008.889	59.65978
#1	519.9631	1053.967	1097.921	1013.662	1068.654	1014.718	62.34816
#2	513.2644	1041.565	1085.851	1013.067	1051.960	1003.060	56.97140
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	39.62588	65.10358	56.44010	553.5828
#1	38.37775	73.16447	55.99721	556.7459
#2	40.87402	57.04269	56.88300	550.4198
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: CVCCV4 Operator:
Run Time: 11/19/07 01:41:09
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	53143.62	532.3699	537.2308	507.9997	53.04463	515.0053	106908.2
#1	53264.29	534.4566	538.2236	508.0188	53.27622	515.9457	107111.8
#2	53022.95	530.2831	536.2382	507.9807	52.81304	514.0648	106704.5
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	523.7790	530.4442	538.1753	52657.66	520.1246	Q110490.1	531.5033
#1	524.0062	532.0106	540.0942	52774.48	522.0393	Q110820.2	533.1155
#2	523.5518	528.8779	536.2564	52540.85	518.2098	Q110160.0	529.8910
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	522.3805	512.8943	26612.56	547.0144	547.7511	103605.5	528.7541
#1	521.9171	514.6268	26725.51	549.3728	549.5905	103757.1	527.2461
#2	522.8438	511.1618	26499.62	544.6559	545.9117	103453.9	530.2622
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	537.1360	543.3699	546.5644	527.7758	544.6450	523.0514	519.0602
#1	538.8298	544.2084	546.4281	527.3032	545.2752	523.8694	520.8989
#2	535.4422	542.5313	546.7007	528.2484	544.0147	522.2335	517.2216
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	520.6567	538.0587	551.4922	540.2589
#1	522.6095	541.7656	553.1763	541.9032
#2	518.7039	534.3518	549.8080	538.6146
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB4 Operator:
Run Time: 11/19/07 01:49:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	20.17587	1.568671	-2.15134	.1988708	-.058713	-.025210	179.4460
#1	24.89145	1.478279	-2.61070	.2525004	-.046308	-.018580	186.7094
#2	15.46029	1.659063	-1.69198	.1452413	-.071119	-.031839	172.1827
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.107868	-.020904	3.510137	13.51721	-.648310	44.83995	.0471725
#1	.0064358	.2029023	3.555835	17.89969	-.380944	53.90281	.1563603
#2	-.222171	-.244711	3.464438	9.134726	-.915675	35.77710	-.062015
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-8.47992	.4095706	12.37768	-1.17419	.7127504	80.47782	3.395524
#1	-6.72379	.8474299	12.45093	-3.05211	.6787410	87.99210	3.372404
#2	-10.2360	-.028289	12.30443	.7037275	.7467598	72.96354	3.418643
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2461536	-.009226	.1948883	2.568049	-.887430	.0518657	-.894155
#1	.1629442	.0784636	.5530561	2.848911	-1.06610	.1449626	-1.93997
#2	.3293629	-.096915	-.163279	2.287188	-.708759	-.041231	.1516563
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.525498	.3332827	-1.92804	-.150225
#1	.3984541	-1.06281	-4.04688	-.183355
#2	-1.44945	1.729377	.1907931	-.117096
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: SP710166-039-039-1/1 Operator:
Run Time: 11/19/07 01:57:53
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	81237.34	8.023989	27.09612	276.4203	5.911512	15.43013	4911.372
#1	83069.17	4.344298	25.94028	281.8704	6.080810	16.02884	5031.178
#2	79405.52	11.70368	28.25196	270.9703	5.742214	14.83141	4791.567
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	451.9262	109.0257	257.2839	204704.6	211.7455	2988.709	7724.593
#1	462.2665	111.1565	264.0659	209776.8	218.2830	3066.431	7915.171
#2	441.5859	106.8949	250.5019	199632.3	205.2080	2910.986	7534.016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7722.090	190.9266	2598.920	16.15922	11.05192	1221.158	16.52052
#1	7908.810	195.2380	2655.953	17.91218	11.65537	1147.135	19.24906
#2	7535.370	186.6153	2541.888	14.40627	10.44848	1295.181	13.79198
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	511.7018	317.1153	99.93520	46.30640	53.94855	8471.209	211.0981
#1	524.3635	324.9071	101.9138	46.37811	55.41228	8667.240	212.5374
#2	499.0401	309.3236	97.95660	46.23470	52.48481	8275.179	209.6587
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	212.0691	9.766863	19.35530	496.5199
#1	221.1557	4.431457	24.65243	506.9721
#2	202.9825	15.10227	14.05816	486.0677
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SD710166-039-039-1/1 Operator:
Run Time: 11/19/07 02:06:15
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	83747.92	1.935811	30.49370	294.9586	5.915414	15.44375	5035.879
#1	92710.80	-.257254	37.50234	326.1811	6.616336	17.53671	5555.712
#2	74785.04	4.128876	23.48506	263.7362	5.214491	13.35079	4516.047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	458.5310	108.9131	262.5036	209226.2	220.7243	3053.804	8131.561
#1	507.3212	120.0261	291.8556	231620.7	246.4695	3390.222	8982.652
#2	409.7408	97.80011	233.1517	186831.6	194.9791	2717.386	7280.470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	8154.559	196.0824	2655.090	19.35382	10.71919	1151.083	20.28761
#1	9026.757	216.8395	2932.176	22.70751	11.55389	1170.982	33.90400
#2	7282.361	175.3254	2378.004	16.00013	9.884499	1131.184	6.671227
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	521.6980	322.3485	96.84397	44.68426	50.56955	8679.686	214.4681
#1	577.7181	356.2380	105.0041	48.88903	53.90885	9597.888	227.5778
#2	465.6779	288.4591	88.68385	40.47949	47.23025	7761.485	201.3584
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	223.8523	8.490574	24.78533	503.2179
#1	255.9153	-2.46120	35.29174	555.2172
#2	191.7893	19.44234	14.27891	451.2187
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: PS710166-039-039-1/1 Operator:
Run Time: 11/19/07 02:14:36
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	63948.40	87.01736	101.7208	143.4745	11.02950	25.37144	8916.762
#1	64003.81	88.84164	104.4996	143.2851	11.05329	25.39724	8942.938
#2	63892.99	85.19308	98.94198	143.6639	11.00572	25.34563	8890.585
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	401.4121	84.71236	222.8516	200613.2	184.7846	7165.771	7335.417
#1	402.5691	84.85067	223.0966	201055.4	184.7362	7184.987	7354.132
#2	400.2551	84.57404	222.6066	200171.1	184.8331	7146.556	7316.703
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7319.468	154.9518	6824.348	82.06451	44.48559	5259.724	98.60733
#1	7334.314	155.3956	6830.656	81.40469	44.50000	5260.719	96.06805
#2	7304.622	154.5079	6818.041	82.72434	44.47118	5258.727	101.1466
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	460.6241	273.9959	78.52434	35.87112	142.6627	7972.590	191.3980
#1	461.7721	274.8286	77.86876	35.90517	143.0751	7985.562	190.7710
#2	459.4762	273.1632	79.17993	35.83706	142.2502	7959.617	192.0249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	181.4779	80.61510	82.78911	448.9845
#1	181.7188	83.37804	80.41789	449.9382
#2	181.2371	77.85216	85.16032	448.0308
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SE710166-039-039-1/1 Operator:
Run Time: 11/19/07 02:22:58
Comment: UG/L 50
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	12335.60	-1.88436	1.173776	24.83435	.0576679	.4711666	732.3260
#1	14463.31	-2.41663	3.036543	29.14228	.0888124	.7857719	850.2364
#2	10207.88	-1.35208	-.688991	20.52643	.0265234	.1565614	614.4156
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	73.40929	9.584770	36.91024	38017.58	20.52610	341.3180	1395.700
#1	86.10175	11.36971	43.42137	44558.82	24.68556	402.4479	1634.725
#2	60.71683	7.799834	30.39911	31476.34	16.36665	280.1881	1156.676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1394.435	22.43042	230.5863	1.058091	.3573591	-45.1935	8.071627
#1	1636.601	26.43623	268.7217	.7209889	.4919717	-107.615	12.02196
#2	1152.269	18.42461	192.4509	1.395193	.2227465	17.22833	4.121297
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	83.62979	36.56792	.7429278	.6318822	7.216096	1536.682	20.81015
#1	97.91112	42.98058	.4876124	1.049031	6.927477	1799.583	24.07477
#2	69.34847	30.15525	.9982431	.2147333	7.504715	1273.781	17.54554
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	20.38398	1.388261	.8929031	79.64220
#1	24.99085	2.777076	-.307155	93.21511
#2	15.77710	-.000553	2.092961	66.06928
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-040-040-1/1 Operator:
Run Time: 11/19/07 02:31:20
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	47318.31	-.147016	4.790392	478.0940	.5632471	2.886528	9407.199
#1	49075.61	-.971602	6.874336	494.3210	.6166493	3.239071	9759.996
#2	45560.99	.6775703	2.706447	461.8669	.5098449	2.533986	9054.401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	308.9862	61.38005	184.0307	145572.9	46.29807	3512.513	H10851.06
#1	320.8539	63.60747	191.1943	151202.6	48.28820	3656.150	H11259.34
#2	297.1186	59.15263	176.8672	139943.3	44.30793	3368.876	10442.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	11046.19	177.4296	1992.644	5.375768	.2038665	203.2585	6.716484
#1	11464.41	184.5779	2062.054	6.259059	.2054049	182.1011	6.529671
#2	10627.98	170.2812	1923.233	4.492477	.2023281	224.4160	6.903297
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	382.4824	254.4439	6.570879	3.163247	-.702067	8968.328	49.63668
#1	397.2250	264.3101	6.318494	2.874214	-1.70055	9299.810	50.15854
#2	367.7398	244.5778	6.823264	3.452281	.2964163	8636.846	49.11483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	44.62865	2.332328	6.897380	367.5865
#1	47.35293	-1.44175	10.10935	380.6801
#2	41.90437	6.106405	3.685408	354.4930
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-041-041-1/1 Operator:
Run Time: 11/19/07 02:39:41
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	31342.28	-.274800	5.647462	40.88238	.4200366	2.434009	593.8995
#1	33415.53	-1.29994	7.583788	43.48327	.5007931	2.921106	631.2917
#2	29269.02	.7503443	3.711137	38.28149	.3392802	1.946911	556.5073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	498.4791	20.90645	104.9899	202706.0	20.76374	1587.334	1065.145
#1	530.4397	21.78214	112.5419	215918.4	22.19035	1695.833	1136.222
#2	466.5185	20.03075	97.43783	189493.7	19.33713	1478.836	994.0672
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1091.401	110.5627	724.0309	5.299620	.5104814	70.95345	8.598871
#1	1163.943	117.4453	771.4463	9.465011	.5749220	41.32433	11.32033
#2	1018.858	103.6800	676.6154	1.134229	.4460409	100.5826	5.877415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	525.7308	159.9133	-3.83386	2.968240	-2.14265	11540.04	27.02797
#1	560.0297	170.3898	-5.47886	3.052259	-4.01887	12292.56	25.78036
#2	491.4319	149.4368	-2.18887	2.884220	-.266425	10787.52	28.27557
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	17.63152	.5256732	7.686487	504.4430
#1	20.39523	.8820992	13.75636	535.5287
#2	14.86781	.1692472	1.616615	473.3573
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-042-042-1/1 Operator:
Run Time: 11/19/07 02:48:03
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	28026.34	2.136480	3.188440	31.79221	.3769639	2.326189	822.8001
#1	27950.17	1.853751	3.239123	31.57294	.3824045	2.529141	836.9935
#2	28102.52	2.419210	3.137756	32.01148	.3715233	2.123238	808.6067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	472.5146	18.51154	97.78460	199277.9	20.86494	1443.932	694.7798
#1	472.3836	18.73648	98.21287	199725.1	20.39098	1444.984	697.0092
#2	472.6456	18.28660	97.35632	198830.6	21.33891	1442.881	692.5504
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	718.9167	90.19124	597.2822	6.061242	.3641899	156.8621	3.099561
#1	718.9265	89.22694	598.4619	6.597632	.1088073	162.8313	3.689396
#2	718.9070	91.15554	596.1025	5.524851	.6195724	150.8930	2.509726
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	532.4844	165.6023	-2.50264	3.398239	-.746571	11861.79	29.92977
#1	533.4304	166.4703	-1.82663	3.798577	-.352683	11848.91	29.57449
#2	531.5385	164.7343	-3.17866	2.997901	-1.14046	11874.66	30.28504
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	16.33244	4.452094	6.865711	512.8491
#1	15.79912	4.490203	7.651241	513.8783
#2	16.86575	4.413985	6.080181	511.8200
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-043-043-1/1 Operator:
Run Time: 11/19/07 02:56:25
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	37011.43	2.202219	6.827936	45.61562	.3084060	2.115919	582.3112
#1	36906.76	1.616467	9.509915	45.42825	.2916393	2.373522	593.6968
#2	37116.10	2.787972	4.145957	45.80299	.3251727	1.858316	570.9255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	462.3342	21.26316	120.3893	201224.6	22.27269	1081.552	1803.264
#1	462.7277	21.46733	120.7910	201670.3	21.98778	1085.548	1809.100
#2	461.9407	21.05898	119.9877	200778.8	22.55760	1077.556	1797.428
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1837.193	111.5249	845.4821	3.848698	.2039408	-24.3097	3.400831
#1	1842.361	111.4507	845.4334	4.173259	.2674376	-53.3049	1.995489
#2	1832.024	111.5991	845.5308	3.524136	.1404439	4.685443	4.806173
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	433.2805	132.4665	-1.84190	2.680255	-.816182	8628.922	26.91521
#1	434.2160	133.1797	-3.39693	2.620587	-1.96229	8621.714	25.57225
#2	432.3450	131.7533	-.286869	2.739922	.3299270	8636.131	28.25817
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	19.95132	3.627592	3.959148	417.2046
#1	20.19543	3.816852	4.351360	416.1660
#2	19.70720	3.438331	3.566937	418.2431
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-044-044-1/1 Operator:
Run Time: 11/19/07 03:04:46
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	43485.52	-1.85303	6.935846	37.47973	.3844110	1.656150	681.5134
#1	49762.36	-5.36728	8.682451	42.91663	.4769818	2.252935	779.7785
#2	37208.67	1.661223	5.189242	32.04282	.2918402	1.059365	583.2483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	380.9606	29.96897	109.6606	163032.5	18.66789	915.6770	1254.984
#1	435.1927	34.24875	126.3917	186542.5	21.06870	1054.668	1438.567
#2	326.7286	25.68919	92.92942	139522.4	16.26707	776.6855	1071.400
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1285.372	106.7975	805.5908	6.087447	.1516763	-50.3455	9.916958
#1	1474.193	122.7511	929.4929	7.867077	.0427204	-110.898	15.55164
#2	1096.551	90.84399	681.6887	4.307817	.2606323	10.20666	4.282271
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	338.1171	124.3428	-3.28224	1.448340	-2.62862	6762.968	18.11661
#1	387.1529	141.8994	-4.92470	1.368398	-3.87278	7733.523	18.16514
#2	289.0814	106.7862	-1.63979	1.528282	-1.38445	5792.412	18.06807
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	18.94342	-3.80704	11.03458	321.5823
#1	22.52036	-8.34267	15.97184	366.0230
#2	15.36647	.7285895	6.097328	277.1417
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-045-045-1/1 Operator:
Run Time: 11/19/07 03:13:08
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	67609.78	-2.25716	9.373319	15.61547	.3001928	1.597168	801.7147
#1	73606.83	-6.16928	11.47017	17.15688	.3819034	2.011249	873.5201
#2	61612.73	1.654965	7.276469	14.07405	.2184822	1.183086	729.9093
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	342.8680	5.404860	78.67806	147385.3	18.12815	649.0763	318.7142
#1	373.1910	5.882110	86.79569	160765.3	20.56843	713.7358	349.8685
#2	312.5450	4.927611	70.56042	134005.4	15.68786	584.4169	287.5598
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	344.1757	125.2191	549.2350	8.600914	.5700909	8.518379	8.193947
#1	377.7324	137.5268	606.0015	7.983850	.4523601	-110.703	14.20486
#2	310.6190	112.9114	492.4685	9.217977	.6878217	127.7393	2.183035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	314.4167	74.79417	-2.09659	1.936508	-3.84335	6785.267	18.66744
#1	343.9421	81.64012	-3.94926	1.463755	-6.31015	7401.497	16.46990
#2	284.8913	67.94821	-.243925	2.409260	-1.37654	6169.036	20.86499
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	17.85840	-.762343	13.28243	299.7878
#1	22.61760	-10.3605	17.15591	324.6179
#2	13.09920	8.835814	9.408958	274.9576
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report QC Standard 11/19/07 03:32:36 AM

Operator:

Method: TRACEV2 Sample Name: CVCCV4
Run Time: 11/19/07 03:24:20
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51707.51	517.5359	504.7059	510.9944	49.27014	494.4013	100324.1
#1	51768.53	515.5565	506.5604	511.3274	49.25558	494.2101	100295.3
#2	51646.49	519.5152	502.8514	510.6614	49.28471	494.5925	100352.9
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	496.9226	486.4662	503.7744	48856.99	489.5108	101557.1	488.3813
#1	496.7502	486.9299	504.3645	48819.31	488.9283	101509.7	488.2163
#2	497.0951	486.0024	503.1844	48894.66	490.0932	101604.4	488.5463
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	501.4390	495.2252	24766.04	513.8178	508.6115	101807.3	509.4462
#1	500.5763	495.5232	24780.79	513.4206	508.1372	101886.1	507.2613
#2	502.3016	494.9271	24751.29	514.2150	509.0858	101728.6	511.6312
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	496.7358	502.9557	514.6536	503.2662	480.1279	498.1574	491.8449
#1	497.0718	502.0605	514.3743	501.6404	478.8970	498.0921	492.0457
#2	496.3998	503.8508	514.9329	504.8920	481.3587	498.2227	491.6441
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	488.3436	522.1796	509.6368	496.1667
#1	487.3696	523.2383	508.5117	496.2248
#2	489.3177	521.1210	510.7619	496.1087
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB4 Operator:
Run Time: 11/19/07 03:32:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	11.27573	-.414420	-1.14977	.1614392	-.006541	-.179038	41.91766
#1	11.24587	-.643263	-1.05051	.1685292	.0075607	-.198806	41.32252
#2	11.30558	-.185576	-1.24903	.1543492	-.020643	-.159269	42.51281
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.0764840	.2440652	.2494543	13.63481	-.951147	26.97800	.0336906
#1	.2344103	.1897998	.0907973	17.22886	-1.05552	31.14768	.0471899
#2	-.081442	.2983306	.4081113	10.04077	-.846774	22.80833	.0201913
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	.4486282	-.007184	9.561617	-.529989	.6808274	53.56962	4.735065
#1	-1.03488	-.008098	9.462322	-.161764	.6737633	23.13831	4.910852
#2	1.932133	-.006271	9.660913	-.898213	.6878915	84.00092	4.559277
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2289108	-.128270	-.231358	1.680773	.8406154	.2929020	-.193971
#1	.0449180	-.141162	-.660074	1.834650	.9633193	.2833588	-.052103
#2	.4129035	-.115377	.1973577	1.526896	.7179115	.3024452	-.335839
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.32984	2.386707	-1.98844	.1104142
#1	-1.55733	1.570779	-1.02814	-.151040
#2	-1.10235	3.202634	-2.94874	.3718680
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: S 710166-046-046-1/1 Operator:
Run Time: 11/19/07 03:41:05
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	30702.10	-2.70277	5.924488	22.04620	.4968992	2.606116	370.7880
#1	34080.47	-6.08363	9.338688	24.70204	.6197883	3.341932	408.4745
#2	27323.74	.6780920	2.510287	19.39036	.3740100	1.870300	333.1015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	462.8300	9.952832	79.69544	231132.6	20.97079	894.4930	435.8917
#1	512.8513	10.40799	90.15710	256616.4	23.70940	1004.958	488.5801
#2	412.8086	9.497675	69.23377	205648.8	18.23217	784.0276	383.2032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	469.8775	80.73313	510.5858	9.506970	-.018842	-196.957	11.27896
#1	529.3912	90.58723	581.6609	11.14679	-.170844	-379.356	20.16981
#2	410.3638	70.87904	439.5107	7.867149	.1331602	-14.5572	2.388113
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	497.5442	115.6642	-7.36882	3.533079	-3.45183	10472.46	22.46904
#1	554.2150	128.9485	-12.0762	3.329799	-5.62970	11643.49	19.62800
#2	440.8734	102.3798	-2.66144	3.736359	-1.27397	9301.431	25.31008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	20.22154	-.602324	14.56151	472.4536
#1	25.74998	-10.0814	21.76078	519.6940
#2	14.69310	8.876774	7.362236	425.2132
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-047-047-1/1 Operator:
Run Time: 11/19/07 03:49:26
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	45739.66	2.200506	4.683635	40.78209	.4692694	2.577054	738.9665
#1	46223.64	.9926758	5.365441	41.23762	.4839377	2.711618	747.0135
#2	45255.67	3.408336	4.001829	40.32656	.4546012	2.442490	730.9195
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	327.9661	15.33023	100.0464	165160.5	14.73104	1057.266	1043.451
#1	330.8865	15.34459	100.9799	166926.3	15.42608	1069.871	1054.819
#2	325.0457	15.31588	99.11282	163394.7	14.03599	1044.660	1032.083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1059.152	112.1670	650.3274	7.607097	.6807235	94.62443	4.967019
#1	1068.708	113.2353	659.6704	9.227230	.6791633	61.70768	5.717543
#2	1049.597	111.0987	640.9844	5.986963	.6822837	127.5412	4.216495
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	348.7455	116.1189	-.716123	2.101863	-.725239	8035.508	19.18276
#1	352.4462	117.2430	-1.65101	1.571777	-2.06843	8111.814	19.26869
#2	345.0449	114.9949	.2187648	2.631948	.6179538	7959.202	19.09682
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	12.50507	3.230427	9.795324	335.7301
#1	13.50467	2.131628	12.77492	337.6758
#2	11.50547	4.329226	6.815727	333.7843
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-048-048-1/1 Operator:
Run Time: 11/19/07 03:57:48
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	17971.51	.8409538	8.013248	50.61206	.5694264	4.997090	670.9648
#1	20860.00	-2.50855	9.346193	58.74322	.7659166	6.109997	760.3128
#2	15083.02	4.190459	6.680303	42.48090	.3729360	3.884184	581.6168
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	471.6448	19.09451	115.6744	249659.0	26.70943	1376.913	615.3784
#1	546.5065	21.23810	134.7904	289215.0	31.34034	1607.706	715.6364
#2	396.7831	16.95091	96.55830	210103.0	22.07852	1146.120	515.1204
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	641.8597	80.73840	305.7403	13.34046	.2612238	-210.563	10.83515
#1	747.8755	93.68439	353.2033	15.72797	.0432034	-374.303	20.72854
#2	535.8439	67.79241	258.2773	10.95295	.4792443	-46.8224	.9417591
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	631.0726	145.2048	-6.22844	3.152166	-2.00912	11557.76	28.44449
#1	731.4467	167.7936	-9.13051	3.095875	-2.30898	13437.22	30.28050
#2	530.6985	122.6160	-3.32636	3.208457	-1.70927	9678.289	26.60848
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	25.84178	.2899225	19.86561	601.0005
#1	31.87014	-4.75739	25.97052	694.0066
#2	19.81342	5.337230	13.76069	507.9944
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-049-049-1/1 Operator:
Run Time: 11/19/07 04:06:10
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	71899.45	-2.32880	8.738382	44.20380	.4939097	3.225626	532.9092
#1	72219.91	-4.74008	7.230103	44.45359	.4929785	3.379839	530.2655
#2	71578.98	.0824833	10.24666	43.95401	.4948409	3.071413	535.5530
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	385.4929	8.123168	111.9952	183717.6	16.73757	577.8010	542.0778
#1	386.2779	7.767360	112.3869	184283.1	17.24726	579.4612	543.4440
#2	384.7078	8.478976	111.6035	183152.1	16.22787	576.1409	540.7116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	556.0923	109.4479	221.9595	15.04975	.3753290	61.06887	4.447755
#1	558.3813	109.3787	219.7264	14.65624	.2164523	-70.3478	3.554527
#2	553.8032	109.5170	224.1925	15.44325	.5342057	192.4855	5.340983
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	371.6979	115.7291	.5759535	2.784818	.9413441	7468.520	20.03711
#1	372.6902	115.9769	-.737263	2.149093	-1.19021	7493.443	18.89470
#2	370.7054	115.4814	1.889170	3.420543	3.072903	7443.599	21.17952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	15.08767	9.618630	17.76519	360.0632
#1	16.42343	6.283760	18.84236	359.7210
#2	13.75192	12.95350	16.68802	360.4054
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-050-050-1/1 Operator:
Run Time: 11/19/07 04:14:32
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	65887.08	-3.73953	14.17390	60.17712	.5568615	4.768052	800.4393
#1	72811.34	-6.29443	15.92457	66.77975	.6895528	5.608055	876.1641
#2	58962.81	-1.18464	12.42324	53.57448	.4241701	3.928049	724.7145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	473.1085	21.42633	120.8463	202233.0	29.20739	1376.633	1341.905
#1	522.6111	23.17757	134.8617	224067.2	32.87121	1535.099	1491.692
#2	423.6060	19.67509	106.8310	180398.9	25.54357	1218.167	1192.118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1343.827	83.94952	863.3461	11.30047	.3342761	-109.985	10.08910
#1	1492.415	92.78446	964.3566	13.29499	.0979101	-356.740	16.44915
#2	1195.239	75.11459	762.3356	9.305943	.5706422	136.7696	3.729052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	456.8913	156.1452	-3.17240	2.520770	-1.35772	8230.513	27.95063
#1	506.3937	173.0639	-5.50454	1.919625	-5.75556	9109.184	26.03097
#2	407.3890	139.2266	-.840267	3.121915	3.040128	7351.842	29.87029
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	29.83566	-2.59091	18.24603	437.3400
#1	36.29121	-12.5698	26.22727	481.2409
#2	23.38011	7.388028	10.26479	393.4391
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-051-051-1/1 Operator:
Run Time: 11/19/07 04:22:54
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	67775.20	-.483623	11.44362	96.09119	.6195273	3.977015	1750.757
#1	73655.06	-1.09055	16.05855	104.5521	.7190266	4.810225	1906.652
#2	61895.32	.1233029	6.828696	87.63032	.5200281	3.143805	1594.863
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	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	419.3368	42.31906	164.7759	191455.4	24.67620	1460.928	5910.627
#1	456.0709	45.83266	180.6541	208740.4	27.70028	1600.928	6447.461
#2	382.6027	38.80547	148.8978	174170.5	21.65211	1320.928	5373.794
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	5926.333	108.1936	741.7037	8.493820	.4460028	-11.0669	8.003664
#1	6462.573	118.2665	813.4152	11.83966	.2199162	-220.575	16.15942
#2	5390.092	98.12058	669.9922	5.147975	.6720895	198.4415	-.152096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	436.9908	161.9718	-.383305	2.442635	-.433253	8030.589	26.47878
#1	476.9308	176.8432	-2.02151	2.430972	-2.27137	8737.371	24.34037
#2	397.0508	147.1003	1.254896	2.454298	1.404865	7323.807	28.61719
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	23.77480	-.142090	12.81166	419.4409
#1	29.38013	-6.06371	20.79123	455.2384
#2	18.16947	5.779528	4.832092	383.6434
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710166-052-052-1/1 Operator:
Run Time: 11/19/07 04:31:16
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	55954.88	-1.12633	4.447387	475.1119	.6601527	3.692291	2320.640
#1	57912.41	-1.68243	7.249750	493.2821	.7205380	3.818926	2402.174
#2	53997.36	-.570240	1.645024	456.9417	.5997673	3.565657	2239.105
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	309.2275	89.69384	177.6919	159959.5	17.56173	2359.451	H18730.94
#1	320.0172	92.89304	184.2808	165813.9	18.65805	2452.451	H19396.16
#2	298.4377	86.49464	171.1030	154105.1	16.46540	2266.451	H18065.71
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	19364.23	183.7799	1609.178	5.804031	.2464906	285.4013	3.543720
#1	20092.54	191.1204	1667.259	5.879687	.4222249	193.4013	8.794106
#2	18635.92	176.4394	1551.097	5.728375	.0707563	377.4014	-1.70667
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	399.8635	223.2977	1.241385	2.173554	-.960674	9144.756	25.47989
#1	414.7388	231.3149	.5567293	2.063599	-1.73430	9478.344	23.99175
#2	384.9882	215.2806	1.926041	2.283510	-.187052	8811.168	26.96803
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	13.60254	1.638559	7.886655	384.3893
#1	15.99109	-.348042	8.993437	397.1931
#2	11.21398	3.625160	6.779873	371.5855
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-001-001-1/1 Operator:
Run Time: 11/19/07 04:39:38
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51710.18	-.960857	4.141769	177.9178	.6270285	3.780120	3272.691
#1	52360.69	-1.06482	5.439302	179.9958	.6418675	3.822207	3326.285
#2	51059.67	-.856894	2.844237	175.8398	.6121894	3.738033	3219.097
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	447.1864	37.29216	130.4057	170382.9	27.67046	2477.218	3498.240
#1	453.3825	37.35886	132.5690	172893.7	28.31126	2519.178	3553.084
#2	440.9903	37.22546	128.2423	167872.1	27.02965	2435.258	3443.396
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	3476.091	189.0438	1237.038	10.52055	.9158795	185.0864	2.516708
#1	3530.446	191.9894	1258.277	12.41685	.7666887	126.9762	6.491398
#2	3421.736	186.0982	1215.799	8.624240	1.065070	243.1967	-1.45798
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	483.1225	167.1313	.7939978	2.775908	-.232875	11439.91	34.70974
#1	490.2764	169.5375	.5381610	2.279811	.1049995	11594.91	32.16684
#2	475.9687	164.7252	1.049835	3.272005	-.570750	11284.91	37.25263
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	24.15072	8.996864	11.28227	464.0494
#1	26.38337	7.549914	14.85020	469.2547
#2	21.91806	10.44382	7.714344	458.8442
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-002-002-1/1 Operator:
Run Time: 11/19/07 04:48:00
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	30906.99	3.369054	7.593872	36.83933	.6247867	5.769173	1712.684
#1	30919.66	3.421831	9.830084	37.06643	.6466259	5.193512	1683.583
#2	30894.31	3.316277	5.357660	36.61224	.6029475	6.344833	1741.785
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	766.4271	17.10451	135.8658	292867.3	83.80856	1628.165	624.9752
#1	764.2311	16.69642	135.0590	291102.8	84.83774	1617.852	620.6644
#2	768.6232	17.51260	136.6726	294631.7	82.77940	1638.478	629.2861
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	650.1985	89.84370	847.3583	15.07309	.9835238	187.9344	-.073138
#1	648.9212	89.99780	839.6668	16.74847	.8324497	213.7584	.1699028
#2	651.4758	89.68961	855.0498	13.39770	1.134598	162.1105	-.316179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	713.9296	157.4895	-1.09278	4.479626	2.436669	15166.39	93.63865
#1	710.3217	156.2819	-1.75233	4.813387	1.628207	15149.85	92.00073
#2	717.5374	158.6971	-.433233	4.145865	3.245131	15182.93	95.27657
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	78.89343	13.84085	15.68909	690.4037
#1	81.25614	16.79389	16.72566	686.9460
#2	76.53072	10.88781	14.65253	693.8613
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-003-003-1/1 Operator:
Run Time: 11/19/07 04:56:22
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	20403.03	4.255238	4.753581	42.47061	.4175810	4.236561	1751.098
#1	20392.08	4.168462	4.484937	42.47178	.4433397	4.308859	1757.302
#2	20413.98	4.342015	5.022224	42.46944	.3918223	4.164263	1744.893
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	576.4611	25.20834	163.7726	216558.8	40.72362	2131.630	1008.202
#1	577.2883	24.98218	164.0174	217058.3	40.90994	2140.334	1010.564
#2	575.6339	25.43450	163.5279	216059.4	40.53731	2122.927	1005.840
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1020.236	98.46845	832.4060	9.444370	.6394108	130.5658	4.737708
#1	1021.762	98.87309	834.3677	8.556502	.9231219	72.75182	5.873920
#2	1018.711	98.06381	830.4443	10.33224	.3556997	188.3798	3.601496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	579.6681	177.9007	-1.37072	3.916318	-1.08508	11982.87	50.10046
#1	581.7524	178.4084	-2.78010	3.437609	-2.22538	11996.20	49.60899
#2	577.5837	177.3930	.0386662	4.395028	.0552292	11969.53	50.59192
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	36.03511	8.638265	9.847315	557.8120
#1	36.56031	7.811386	8.928951	557.9764
#2	35.50990	9.465143	10.76568	557.6475
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CVCCV5 Operator:
Run Time: 11/19/07 05:07:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	53480.19	534.6703	540.8752	514.4755	53.56529	521.9509	108696.1
#1	53333.05	533.4138	538.4534	514.8001	53.19189	520.3334	107925.8
#2	53627.34	535.9269	543.2970	514.1508	53.93869	523.5683	109466.4
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	531.9882	534.7411	539.3010	53234.27	527.3881	Q111038.8	536.1625
#1	528.8623	530.1520	535.6436	52806.11	525.1717	Q110126.6	531.6910
#2	535.1140	539.3302	542.9584	53662.43	529.6043	Q111950.9	540.6341
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	526.8926	521.5529	26432.96	546.9141	Q552.3967	104291.8	532.5459
#1	524.2883	520.2991	26233.90	542.4238	548.1927	103992.7	532.9315
#2	529.4968	522.8068	26632.02	Q551.4044	Q556.6006	104590.9	532.1603
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	541.5674	548.4233	Q550.8072	533.8206	545.7451	527.9160	523.4568
#1	537.3360	544.5392	546.7990	529.6716	541.1580	524.9116	520.0579
#2	545.7989	Q552.3074	Q554.8154	537.9695	Q550.3323	530.9204	526.8558
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	529.3541	544.7084	548.0168	543.7306
#1	527.7286	540.0960	543.5877	538.8975
#2	530.9797	549.3208	552.4460	548.5637
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB5 Operator:
Run Time: 11/19/07 05:15:58
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	4.089342	.8317995	-4.66838	.1254727	-.074088	.0048585	284.2629
#1	7.493150	1.812463	-3.79953	.1206543	-.049616	.0755422	292.6669
#2	.6855337	-.148864	-5.53723	.1302911	-.098560	-.065825	275.8589
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.1072071	.1060144	6.217779	19.19790	-.299381	30.65388	.1807360
#1	.2010806	.0709551	6.004670	19.05695	-.351495	40.35542	.2046443
#2	.0133335	.1410736	6.430888	19.33885	-.247266	20.95234	.1568276
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-16.4034	.8194981	16.32756	-.703010	.8157721	37.82621	1.552411
#1	-16.8956	1.074777	20.08367	.0152702	.9098665	80.16219	3.137693
#2	-15.9111	.5642192	12.57144	-1.42129	.7216777	-4.50976	-.032872
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0852768	.1222811	.1827403	1.501662	-.838657	.4198510	1.243068
#1	.2328791	.2036058	.4414626	1.422728	.3029135	.6520933	.7478544
#2	-.062325	.0409563	-.075982	1.580597	-1.98023	.1876086	1.738283
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.07072	1.358928	-1.73410	-.016773
#1	-.901287	1.770512	-.862467	.0606291
#2	-1.24016	.9473440	-2.60572	-.094176
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

GPL Laboratories, LLLP

Document Control No: GP_M_203

ICP ANALYSIS LOG

Instrument ID: Trace (375590) Inst. Method: Trace V2 Nebulizer: CONICAL Analytical Batch No: 071119V
Profile: 0.00.2371 Intensity: 10894 At Setting: E98

Workorder	Client	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Comments / Dilution
711069	Parsons		113	e	11-16-07	6010B	
711099	TideWater	101393	116	s	11-19-07	↓	
711033	Alion		096	↓	11-12-07	↓	
710183	SC&A	101389	039	↓	10-29-07	6010C	Pb only (ICX on all)
710166	↓		037	↓	10-26-07	↓	↓ ↓

11-20-07

Source Solution Numbers				Post Digestion Spikes
Stds.	Number	Stds.	Number	Spike 9.9 mls of sample with 0.1 mls of 71513
S0	129-116-10	ICV	42173	Samples:
S1	42196	CCV	42200	711099-006-006-1/1
S2	42197	ICSA	42009	711033-003-003-1/1
S3	41944	ICSAB	42010	710166-001-001-1/1
S4	42097	CRI	41805	
S5	—	Low Ck	41820	
Ints	41924	LR	42129	

Analyst: [illegible] Date: 20/NOV/07 Reviewed: KA Date: 11-20-07

Supersedes GP_M_196

ICP ANALYSIS LOG

GPL - Maryland Laboratory

ICPST Analysis Log

Data File: 071119V.ARC

Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time	Seq	Sample Name	Dil	Date	Time
1	STD0		11/10/2007	11:43	31	BCCCB3		11/10/2007	16:30	61	S 711033-011-021-1/2		11/10/2007	22:18	91	S 710166-004-004-1/1		10/20/2007	2:35					
2	STD1		11/10/2007	11:51	32	S 711099-002-002-1/1		11/10/2007	16:44	62	S 711033-012-023-1/2		11/10/2007	22:27	92	CVCCV5		10/20/2007	2:40					
3	STD2		11/10/2007	12:00	33	S 711099-003-003-1/1		11/10/2007	16:55	63	S 711033-013-025-1/2		11/10/2007	22:35	93	BCCCB5		10/20/2007	2:55					
4	STD3		11/10/2007	12:08	34	S 711099-004-004-1/1		11/10/2007	17:03	64	S 711033-014-027-1/2		11/10/2007	22:43	94	S 710166-005-005-1/1		10/20/2007	3:03					
5	STD4		11/10/2007	12:16	35	S 711099-005-005-1/1		11/10/2007	17:12	65	CRCRI Fe		11/10/2007	22:55	95	S 710166-006-006-1/1		10/20/2007	3:11					
6	MICV		11/10/2007	12:21	36	S 711099-006-006-1/1		11/10/2007	17:20	66	AICSA Mn		11/10/2007	23:03	96	S 710166-007-007-1/1		10/20/2007	3:20					
7	BICB		11/10/2007	12:29	37	SP711099-006-006-1/1		11/10/2007	17:28	67	BICSAB		11/10/2007	23:11	97	S 710166-008-008-1/1		10/20/2007	3:28					
8	CVCCV		11/10/2007	12:36	38	SD711099-006-006-1/1		11/10/2007	17:37	68	CVCCV4		11/10/2007	23:20	98	S 710166-009-009-1/1		10/20/2007	3:36					
9	BCCCB		11/10/2007	12:46	39	SE711099-006-006-1/1		11/10/2007	17:45	69	BCCCB4		11/10/2007	23:28	99	S 710166-010-010-1/1		10/20/2007	3:45					
10	REPORT LMT Fe		11/10/2007	12:52	40	SE711099-006-006-1/1		11/10/2007	17:53	70	S 711033-015-029-1/2		11/10/2007	23:36	100	S 710166-011-011-1/1		10/20/2007	3:53					
11	REPORT LMT		11/10/2007	13:07	41	BLK 006		11/10/2007	18:05	71	S 711033-016-031-1/2		11/10/2007	23:48	101	S 710166-012-012-1/1		10/20/2007	4:02					
12	CRCRI Cu, Sn		11/10/2007	13:16	42	CVCCV3 Sn		11/10/2007	18:16	72	S 711033-017-033-1/2		11/10/2007	23:53	102	S 710166-013-013-1/1		10/20/2007	4:10					
13	AICSA Mn		11/10/2007	13:24	43	BCCCB3		11/10/2007	18:24	73	S 711033-018-035-1/2		11/20/2007	0:02	103	S 710166-014-014-1/1		10/20/2007	4:18					
14	BICSAB		11/10/2007	13:33	44	CVCCV3 Sn		11/10/2007	18:33	74	S 711033-019-037-1/2		11/20/2007	0:10	104	CVCCV5		10/20/2007	4:30					
15	LR		11/10/2007	13:41	45	BCCCB3		11/10/2007	18:42	75	S 711033-020-039-1/2		11/20/2007	0:18	105	BCCCB5		10/20/2007	4:38					
16	CVCCV3		11/10/2007	13:55	46	BKS 006		11/10/2007	20:10	76	S 711033-021-041-1/2		11/20/2007	0:27	106	S 710166-015-015-1/1		10/20/2007	4:46					
17	BCCCB3		11/10/2007	14:08	47	S 711033-003-005-1/2		11/10/2007	20:18	77	S 710183-004-004-1/1		10/20/2007	0:35	107	S 710166-016-016-1/1		10/20/2007	4:55					
18	BLK 113		11/10/2007	14:16	48	SP711033-003-005-1/2		11/10/2007	20:27	78	S 710183-005-005-1/1		10/20/2007	0:43	108	S 710166-017-017-1/1		10/20/2007	5:03					
19	BKS 113		11/10/2007	14:24	49	SD711033-003-005-1/2		11/10/2007	20:36	79	S 710183-006-006-1/1		10/20/2007	0:52	109	S 710166-018-018-1/1		10/20/2007	5:11					
20	B071115 BE1		11/10/2007	14:42	50	SE711033-003-005-1/2		11/10/2007	20:44	80	CVCCV4 Sn		11/20/2007	1:03	110	S 710166-019-019-1/1		10/20/2007	5:20					
21	S 711099-001-003-1/1		11/10/2007	14:51	51	SE711033-003-005-1/2		11/10/2007	20:52	81	BCCCB4		11/20/2007	1:11	111	S 710166-020-020-1/1		10/20/2007	5:28					
22	SP711099-001-003-1/1		11/10/2007	14:59	52	S 711033-004-007-1/2		11/10/2007	21:00	82	BLK 037		11/20/2007	1:20	112	CRCRI		11/20/2007	5:42					
23	SD711099-001-003-1/1		11/10/2007	15:07	53	S 711033-005-009-1/2		11/10/2007	21:09	83	BKS 037		11/20/2007	1:28	113	AICSA Mn		11/20/2007	5:51					
24	SE711099-001-003-1/1		11/10/2007	15:16	54	S 711033-006-011-1/2		11/10/2007	21:17	84	S 710100-001-001-1/1		10/20/2007	1:38	114	BICSAB		11/20/2007	5:59					
25	BLK 118		11/10/2007	15:27	55	S 711033-007-013-1/2		11/10/2007	21:25	85	SP710166-001-001-1/1		10/20/2007	1:46	115	CVCCV6		11/20/2007	6:07					
26	BKS 118		11/10/2007	15:35	56	CVCCV4		11/10/2007	21:37	86	SD710166-001-001-1/1		10/20/2007	1:53	116	BCCCB6		11/20/2007	6:16					
27	S 711099-001-001-1/1		11/10/2007	15:43	57	BCCCB4		11/10/2007	21:45	87	SP710166-001-001-1/1		10/20/2007	2:02										
28	CVCCV3 Sn		11/10/2007	15:55	58	S 711033-008-015-1/2		11/10/2007	21:53	88	SE710166-001-001-1/1		10/20/2007	2:10										
29	BCCCB3		11/10/2007	16:03	59	S 711033-009-017-1/2		11/10/2007	22:03	89	S 710166-002-002-1/1		10/20/2007	2:18										
30	CVCCV3 Sn		11/10/2007	16:28	60	S 711033-010-019-1/2		11/10/2007	22:10	90	S 710166-003-003-1/1		10/20/2007	2:27										

Analyst Signature: KC Date: 2/Nov/2007 Analyst Signature: Date:

Sample Dilutions:

QC 711033-003-005-1/2	2x for Ti - Mn		711033-014	2x for Ti
006		Fe	015	
008		5x for Zn	016	
012		Fe	017	

Method: TRACEV2 Standard: STD0
Run Time: 11/19/07 11:43:35

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-.00305	.00094	-.00138	.00181	.00139	.00087	.03636
#1	-.00288	.00090	-.00159	.00182	.00133	.00096	.03783
#2	-.00323	.00097	-.00118	.00181	.00146	.00077	.03490

Elem	Cr	Co	Cu	Fe	Mg	Mn	Mn3441
Avge	.00037	-.00050	.00559	.00032	.00025	.00021	-.01521
#1	.00031	-.00051	.00593	.00031	.00033	.00024	-.01487
#2	.00043	-.00049	.00524	.00032	.00018	.00018	-.01556

Elem	Ni	K	Ag	Na	Tl	V	Zn
Avge	.00026	.01094	.00030	-.01750	-.00150	.00012	.00382
#1	.00084	.01079	.00031	-.01801	-.00149	.00018	.00381
#2	-.00032	.01109	.00028	-.01700	-.00150	.00006	.00382

Elem	B	Mo	Sn	Ti	1/Pb	2/Pb	1/Se
Avge	.00086	-.00031	.00035	.00048	-.01848	.00004	-.00296
#1	.00084	-.00027	.00104	.00053	-.02364	.00077	-.00396
#2	.00089	-.00035	-.00035	.00043	-.01332	-.00069	-.00197

Elem	2/Se	2V
Avge	.0015	.00011
#1	.0014	.00010
#2	.0016	.00012

Method: TRACEV2 Standard: STD1
Run Time: 11/19/07 11:51:58

Elem	Al	Sb	As	Ba	Be	Cd	Cr
Avge	1.9842	.43010	.41317	.80479	.08706	2.4074	.24133
#1	1.9814	.43194	.41542	.80261	.08744	2.4118	.24163
#2	1.9869	.42826	.41093	.80697	.08668	2.4031	.24103

Elem	Co	Cu	Fe	Mn	Mn3441	Ni	Ag
Avge	.45854	.29884	1.3313	.42128	.12988	.83152	.46502
#1	.46193	.29959	1.3375	.42381	.13057	.83250	.46668
#2	.45516	.29809	1.3250	.41875	.12920	.83055	.46335

Elem	Tl	V	Zn	B	Mo	Sn	Ti
Avge	.19888	.18811	.74470	.55453	.39153	.23850	1.7477
#1	.19912	.18889	.74858	.55416	.39074	.24129	1.7489
#2	.19864	.18733	.74082	.55490	.39233	.23571	1.7465

Elem	1/Pb	2/Pb	1/Se	2/Se	2V
Avge	.99576	.44920	.43944	.2781	.17944
#1	.99622	.45172	.44096	.2795	.18041
#2	.99530	.44668	.43792	.2767	.17847

Method: TRACEV2 Standard: STD2
Run Time: 11/19/07 12:00:21

Elem	Al	Sb	As	Ba	Be	Cd	Cr
Avge	3.9822	.86646	.83825	1.6034	.17583	4.8135	.48551
#1	3.9598	.86042	.83544	1.5935	.17550	4.8018	.48457
#2	4.0045	.87250	.84106	1.6133	.17615	4.8252	.48645

Elem	Co	Cu	Fe	Mn	Mn3441	Ni	Ag
Avge	.93905	.60633	2.7004	.86222	.28038	1.6689	.94620
#1	.93709	.60399	2.6949	.86031	.27938	1.6649	.94419
#2	.94100	.60868	2.7059	.86412	.28138	1.6729	.94821

Elem	Tl	V	Zn	B	Mo	Sn	Ti
Avge	.39880	.38462	1.4969	1.1115	.79688	.49497	3.5407
#1	.39650	.38377	1.4941	1.1073	.79253	.49381	3.5312
#2	.40110	.38548	1.4996	1.1157	.80124	.49613	3.5503

Elem	1/Pb	2/Pb	1/Se	2/Se	2V
Avge	2.0247	.91242	.89918	.5619	.36900
#1	2.0246	.91423	.90217	.5622	.36871
#2	2.0248	.91061	.89618	.5616	.36930

Standardization Rpt.

Method: TRACEV2 Standard: STD3
Run Time: 11/19/07 12:08:44

Elem	Ca	Mg	K	Na
Avge	26.098	13.982	6.0446	3.1843
#1	26.160	14.035	6.0571	3.1792
#2	26.037	13.929	6.0322	3.1895

Method: TRACEV2 Standard: STD4
Run Time: 11/19/07 12:15:36

Elem	1/Pb	2/Pb
Avge	3.8951	1.8899
#1	3.9043	1.8917
#2	3.8859	1.8880

Standardization Report 11/19/07 12:21:20 PM page 1

Method: TRACEV2 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Al	308.215	Multiple	Standards	25130.7	77.0485	11/19/07 12:00:21
Sb	206.838	Multiple	Standards	1159.13	-1.07471	11/19/07 12:00:21
As	189.042	Multiple	Standards	1190.41	1.66364	11/19/07 12:00:21
Ba	493.409	Multiple	Standards	623.653	-1.13308	11/19/07 12:00:21
Be	313.042	Multiple	Standards	578.881	-.804733	11/19/07 12:00:21
Cd	226.502	Multiple	Standards	210.110	-.181915	11/19/07 12:00:21
Ca	317.933	STD3	STD0	1.19021	.021473	11/19/07 12:15:36
Cr	267.716	Multiple	Standards	2065.08	-.748006	11/19/07 12:00:21
Co	228.616	Multiple	Standards	1078.53	.566720	11/19/07 12:00:21
Cu	324.753	Multiple	Standards	1685.16	-9.38587	11/19/07 12:00:21
Fe	271.441	Multiple	Standards	37333.0	-9.99683	11/19/07 12:00:21
Pb	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Mg	279.078	STD3	STD0	1.34341	-.000473	11/19/07 12:15:36
Mn	257.610	Multiple	Standards	1159.75	-.219142	11/19/07 12:00:21
Mn3441	344.199	Multiple	Standards	3376.52	51.3895	11/19/07 12:00:21
Ni	231.604	Multiple	Standards	600.384	-.148870	11/19/07 12:00:21
K	766.491	STD3	STD0	1.12749	-.000256	11/19/07 12:15:36
Se	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Ag	328.068	Multiple	Standards	1066.52	-.292853	11/19/07 12:00:21
Na	330.232	STD3	STD0	1.14512	.003301	11/19/07 12:15:36
Tl	190.864	Multiple	Standards	2480.20	3.70872	11/19/07 12:00:21
V	292.402	Multiple	Standards	2632.98	-.293815	11/19/07 12:00:21
Zn	213.856	Multiple	Standards	680.116	-2.58582	11/19/07 12:00:21
B	249.678	Multiple	Standards	904.820	-.778870	11/19/07 12:00:21
Mo	202.030	Multiple	Standards	1264.42	.407234	11/19/07 12:00:21
Sn	189.989	Multiple	Standards	2060.41	-.668665	11/19/07 12:00:21
Ti	334.941	Multiple	Standards	284.320	-.119756	11/19/07 12:00:21
1/Pb	220.351	Multiple	Standards	509.369	9.41441	11/19/07 12:15:36
2/Pb	220.352	Multiple	Standards	1075.81	.014515	11/19/07 12:15:36
1/Se	196.021	Multiple	Standards	1117.78	3.33654	11/19/07 12:00:21
2/Se	196.022	Multiple	Standards	1747.88	-2.61667	11/19/07 12:00:21
2V	292.402	Multiple	Standards	2516.99	-.249551	11/19/07 12:00:21

Method: TRACEV2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	STD0	.000000	.336050	-.336050
		STD1	50000.0	49941.2	58.8008
		STD2	100000.	100151.	-151.234

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	STD0	.000000	.010402	-.010402
		STD1	500.000	497.471	2.52872
		STD2	1000.00	1003.26	-3.26434

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As	189.042	STD0	.000000	.015636	-.015636
		STD1	500.000	493.509	6.49130
		STD2	1000.00	999.527	.473450

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba	493.409	STD0	.000000	-.003403	.003403
		STD1	500.000	500.776	-.775604
		STD2	1000.00	998.829	1.17126

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.042	STD0	.000000	.002239	-.002239
		STD1	50.0000	49.5939	.406067
		STD2	100.000	100.979	-.978722

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd	226.502	STD0	.000000	-.000133	.000133
		STD1	500.000	505.647	-5.64655
		STD2	1000.00	1011.19	-11.1868

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Ca	317.933	STD0	.064753	.036363	.028390
		STD3	31.0841	26.0983	4.98573

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	STD0	.000000	.008278	-.008278
		STD1	500.000	497.624	2.37570
		STD2	1000.00	1001.87	-1.87128

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.616	STD0	.000000	.028894	-.028894
		STD1	500.000	495.122	4.87793
		STD2	1000.00	1013.36	-13.3596

CorCoef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu	324.753	STD0	.000000	.029966	-.029966
		STD1	500.000	494.205	5.79459
		STD2	1000.00	1012.38	-12.3835

CorCoef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	271.441	STD0	.000000	1.77974	-1.77974
		STD1	50000.0	49689.6	310.379
		STD2	100000.	100803.	-803.039

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Mg	279.078	STD0	-.000131	.000255	-.000386
		STD3	18.7835	13.9823	4.80119

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	STD0	.000000	.028772	-.028772
		STD1	500.000	488.358	11.6424
		STD2	1000.00	999.733	.267090

CorCoef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn3441	344.199	STD0	.000000	.022770	-.022770
		STD1	500.000	489.946	10.0545
		STD2	1000.00	998.109	1.89099

CorCoef: 0.99994

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni	231.604	STD0	.000000	.004579	-.004579
		STD1	500.000	499.084	.915741
		STD2	1000.00	1001.83	-1.83142

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	.012078	.010939	.001139
		STD3	6.81503	6.04465	.770382

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	.021915	-.021915
		STD1	500.000	495.659	4.34140
		STD2	1000.00	1008.85	-8.84955

CorCoef: 0.99995

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Na	330.232	STD0	-.016744	-.017504	.000760
		STD3	3.64972	3.18431	.465411

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl	190.864	STD0	.000000	-.001425	.001425
		STD1	500.000	496.977	3.02316
		STD2	1000.00	992.813	7.18652

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	.028041	-.028041
		STD1	500.000	494.990	5.00964
		STD2	1000.00	1012.41	-12.4132

CorCoef: 0.99992

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn	213.856	STD0	.000000	.009579	-.009579
		STD1	500.000	503.895	-3.89493
		STD2	1000.00	1015.45	-15.4526

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	.003735	-.003735
		STD1	500.000	500.974	-.973846
		STD2	1000.00	1004.94	-4.93579

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo	202.030	STD0	.000000	.021324	-.021324
		STD1	500.000	495.470	4.53027
		STD2	1000.00	1008.00	-7.99854

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	STD0	.000000	.047116	-.047116
		STD1	500.000	490.739	9.26132
		STD2	1000.00	1019.17	-19.1699

CorCoef: 0.99977

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti	334.941	STD0	.000000	.016260	-.016260
		STD1	500.000	496.788	3.21237
		STD2	1000.00	1006.58	-6.58319

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/Pb	220.351	STD0	.000000	.001022	-.001022
		STD1	500.000	516.623	-16.6234
		STD2	1000.00	1040.72	-40.7175
		STD4	2000.00	1993.46	6.54138

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/Pb	220.352	STD0	.000000	.059902	-.059902
		STD1	500.000	483.262	16.7379
		STD2	1000.00	981.603	18.3972
		STD4	2000.00	2033.14	-33.1434

CorCoef: 0.99994

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/Se	196.021	STD0	.000000	.024192	-.024192
		STD1	500.000	494.533	5.46735
		STD2	1000.00	1008.42	-8.41876

CorCoef: 0.99994

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/Se	196.022	STD0	.000000	.015611	-.015611
		STD1	500.000	483.504	16.4958
		STD2	1000.00	979.497	20.5026

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2V	292.402	STD0	.000000	.032149	-.032149
		STD1	500.000	451.405	48.5953
		STD2	1000.00	928.529	71.4713

CorCoef: 0.99987

Method: TRACEV2 Sample Name: IVICV Operator:
Run Time: 11/19/07 12:21:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	5065.246	404.2550	Q429.4161	417.9927	41.43924	41.49808	4888.273
#1	5091.768	405.8071	Q428.1531	Q420.9758	41.27743	41.37735	4866.528
#2	5038.725	402.7029	Q430.6791	415.0095	41.60105	41.61880	4910.018
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	406.2401	Q429.6139	398.5840	5061.004	Q421.7115	4915.631	410.9614
#1	406.3708	Q427.2161	397.8741	5033.521	Q421.1903	4894.145	408.7742
#2	406.1094	Q432.0117	399.2939	5088.486	Q422.2328	4937.117	413.1486
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	400.8072	415.6641	4989.690	Q423.8277	405.1961	9852.246	398.8378
#1	399.7244	416.6086	5003.423	Q426.3182	404.0930	9874.986	396.5433
#2	401.8899	414.7196	4975.958	Q421.3372	406.2992	9829.507	401.1323
Errors	NOCHECK	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value		400.0000	5000.000	400.0000	400.0000	10000.00	400.0000
Range		5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	414.3415	Q425.0181	Q423.5064	405.5913	415.1445	412.4411	419.8331
#1	412.4029	Q423.3964	Q423.0515	403.7310	412.4651	412.7170	419.4676
#2	416.2801	Q426.6397	Q423.9613	407.4517	417.8238	412.1652	420.1986
Errors	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	422.6507	420.2987	425.5921	413.2752
#1	422.0516	422.1010	428.4267	411.6211
#2	423.2498	418.4963	422.7575	414.9293
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BIICB Operator:
Run Time: 11/19/07 12:29:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	9.042701	.5911859	-.287069	-.021661	-.247011	-.149329	81.20517
#1	6.282583	.1852813	-.791929	-.040808	-.261672	-.177561	91.80216
#2	11.80282	.9970905	.2177907	-.002514	-.232351	-.121097	70.60819
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.1954713	.5889280	2.035840	-1.14406	.8940306	-.773204	-.026510
#1	.2444084	.5666764	2.488658	.0703359	.6112568	-1.26192	-.025107
#2	.1465341	.6111796	1.583022	-2.35846	1.176804	-.284487	-.027914
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-5.96570	-.410624	4.393147	-.009679	-.082169	27.63449	-3.18565
#1	-7.53622	-.486859	3.537177	-.160280	-.047615	-.825361	-2.85031
#2	-4.39519	-.334390	5.249116	.1409228	-.116722	56.09433	-3.52099
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.3650651	-.122305	.5311988	1.758748	-1.65990	.0188280	-1.71233
#1	.5878127	-.066050	.9706799	2.120617	-3.11788	.0402836	-4.16942
#2	.1423175	-.178560	.0917176	1.396878	-.201926	-.002628	.7447702
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	2.197114	-5.89096	2.930864	.5676911
#1	3.001499	-7.49816	3.508562	.2567985
#2	1.392729	-4.28376	2.353166	.8785836
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: CVCCV Operator:
Run Time: 11/19/07 12:38:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	50836.94	507.6940	514.5525	490.0793	50.75456	497.0914	98406.89
#1	50864.18	510.0256	514.8455	490.0597	50.84695	497.9577	98587.02
#2	50809.71	505.3625	514.2596	490.0989	50.66216	496.2251	98226.77
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	498.9286	510.2552	513.6384	50304.25	505.8525	98909.89	512.0101
#1	499.6353	511.7337	514.4448	50427.04	508.8867	99124.44	513.4099
#2	498.2219	508.7766	512.8321	50181.45	502.8184	98695.35	510.6103
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	500.2027	493.4744	24306.42	517.3103	524.6470	99800.29	502.4059
#1	500.8863	494.1744	24316.26	517.3259	525.5260	99833.29	499.7604
#2	499.5191	492.7745	24296.58	517.2947	523.7680	99767.29	505.0514
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	515.3506	518.1511	518.5663	508.7083	527.9665	510.3919	507.3238
#1	516.7089	519.4426	517.6382	506.9455	530.0458	511.6037	508.6172
#2	513.9924	516.8596	519.4943	510.4710	525.8873	509.1802	506.0305
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	505.1168	516.4505	517.7401	518.9334
#1	509.0213	515.4711	518.2532	520.4346
#2	501.2123	517.4299	517.2270	517.4321
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB Operator:
Run Time: 11/19/07 12:46:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	20.25797	-.239218	.2442244	.0475529	-.223463	.0196450	82.32819
#1	22.37013	.1467457	-.578477	.1189878	-.199385	.1335222	76.30528
#2	18.14581	-.625181	1.066926	-.023882	-.247542	-.094232	88.35108
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.033570	.0363034	1.735008	4.841665	.4319065	17.19245	.0244356
#1	-.228692	.2730820	1.678862	7.943228	.1931425	22.93919	.0734068
#2	.1615514	-.200475	1.791154	1.740103	.6706704	11.44570	-.024536
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-5.46958	.0207020	5.657641	-.064715	.0087714	53.31128	-2.49437
#1	-3.33523	-.060978	6.454786	-.068553	.0865998	100.5143	-4.19345
#2	-7.60394	.1023822	4.860495	-.060877	-.069057	6.108295	-.795299
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.126219	.0213567	-.107135	1.610412	.5593396	.0735159	1.321992
#1	-.180585	-.029337	.3544769	2.178850	1.054773	.1775633	.8972711
#2	-.071853	.0720502	-.568746	1.041975	.0639063	-.030531	1.746713
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.013230	-.963516	.3845912	.0407858
#1	-.159015	-2.43616	1.115156	-.264194
#2	.1325559	.5091280	-.345973	.3457654
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: REPORT LMT Operator:
Run Time: 11/19/07 12:57:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	213.8887	17.69829	19.30677	4.758769	1.791485	5.912869	1071.009
#1	210.7247	Q15.62590	17.75052	4.649099	1.750090	5.687121	1055.849
#2	217.0528	19.77068	20.86301	4.868438	1.832879	6.138617	1086.170
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	6.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	4.569864	4.777219	Q12.04724	149.0922	10.38543	252.7824	5.013085
#1	Q3.464405	Q3.624405	11.27597	135.4238	10.77251	245.6771	4.842030
#2	5.675324	5.930033	Q12.81850	162.7607	9.998363	259.8878	5.184142
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-7.46837	9.263292	228.4356	21.66545	4.502929	2371.018	27.98169
#1	-12.2830	8.589694	218.4793	21.15625	4.007599	2271.468	Q23.80361
#2	-2.65379	9.936890	238.3920	22.17465	4.998259	2470.567	32.15978
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		10.00000	250.0000		5.000000	2500.000	30.00000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	9.715876	20.96991	16.75411	5.393870	25.51000	25.56636	10.16383
#1	9.194420	20.68570	15.59830	4.834034	23.66881	25.10164	10.21817
#2	10.23733	21.25411	17.90993	5.953706	27.35119	26.03108	10.10949
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	10.49614	17.53729	23.72943	9.671613
#1	11.04958	17.14570	23.16143	9.159368
#2	9.942702	17.92887	24.29744	10.18386
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: REPORT LMT Operator:
Run Time: 11/19/07 13:07:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	203.9183	19.83724	22.44321	4.792761	1.824439	6.176468	1029.592
#1	208.0077	21.52246	23.41277	4.850171	1.838323	6.239694	1051.122
#2	199.8290	18.15202	21.47365	4.735351	1.810556	6.113242	1008.062
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	6.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	4.938782	5.117850	11.58020	161.1150	9.793897	251.6206	5.019939
#1	4.990179	5.232049	Q12.16725	172.5597	9.009949	254.2361	5.121643
#2	4.887384	5.003651	10.99314	149.6704	10.57784	249.0051	4.918234
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	.5355266	10.37629	238.8680	21.60157	5.309703	2528.152	27.10902
#1	2.175824	10.66439	238.4092	20.47281	5.294539	2551.049	28.72125
#2	-1.10477	10.08818	239.3269	22.73033	5.324866	2505.255	25.49678
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		10.00000	250.0000		5.000000	2500.000	30.00000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	9.865696	20.63787	16.30275	5.316479	26.13891	25.18877	10.38388
#1	10.05670	20.84407	16.57276	5.223450	25.59065	25.40586	8.697566
#2	9.674693	20.43166	16.03274	5.409508	26.68716	24.97168	12.07019
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	9.498813	20.49100	22.15676	10.07572
#1	9.166045	16.83821	22.29001	10.01891
#2	9.831580	24.14378	22.02351	10.13252
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: CRCRI Operator:
Run Time: 11/19/07 13:16:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	416.7693	125.6705	22.60443	402.0034	10.85862	11.09293	Q781.7208
#1	418.7923	125.1235	20.72555	402.2229	10.89488	11.19874	Q787.8268
#2	414.7464	126.2175	24.48332	401.7840	10.82237	10.98712	Q775.6147
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	500.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	21.43594	124.2169	58.97332	236.6712	6.948551	570.3677	34.46814
#1	21.37244	124.4180	59.30264	243.3624	6.660782	574.2679	34.59714
#2	21.49943	124.0158	58.64400	229.9800	7.236319	566.4675	34.33915
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	10.68920	86.01506	536.1100	12.43083	22.35886	1016.779	16.31733
#1	11.33006	86.69953	536.9356	10.59483	22.23084	972.3976	17.64630
#2	10.04833	85.33059	535.2844	Q14.26683	22.48688	1061.160	Q14.98837
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		80.00000	500.0000	10.00000	20.00000	1000.000	20.00000
Range		25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	119.2639	48.40369	16.42262	6.079539	Q33.82316	28.02076	6.218848
#1	119.5977	48.70536	16.53049	Q6.343039	Q35.03272	28.02619	7.213478
#2	118.9301	48.10200	16.31474	5.816040	Q32.61360	28.01532	5.224219
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	100.0000	40.00000	15.00000	5.000000	25.00000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	7.313297	11.14918	13.07155	115.3011
#1	6.384330	11.95896	9.912653	115.6694
#2	8.242265	10.33940	16.23044	114.9328
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IAICSA Operator:
Run Time: 11/19/07 13:24:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	491046.0	2.665297	2.629576	1.092799	-.552967	4.129275	524586.7
#1	491105.5	-1.77941	1.594747	1.146766	-.559592	3.901362	523687.7
#2	490986.5	7.110002	3.664406	1.038833	-.546342	4.357189	525485.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	2.277320	3.044282	5.300344	205766.5	-2.54226	515879.1	Q12.05009
#1	2.246580	2.677503	5.033021	205428.8	-2.04448	514717.2	Q12.15195
#2	2.308060	3.411061	5.567667	206104.2	-3.04004	517040.9	Q11.94822
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	42.31185	3.922261	15.75463	.4736618	.0922367	-154.958	-9.68820
#1	43.64105	3.325594	13.61600	.9862539	.1300304	-210.725	-8.10692
#2	40.98264	4.518929	17.89327	-.038930	.0544429	-99.1924	-11.2695
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.4253678	2.051771	4.114018	1.421705	-3.38933	12.99967	8.628326
#1	.4663453	2.120768	4.060428	.3649126	-5.56909	12.81595	8.605179
#2	.3843903	1.982775	4.167609	2.478498	-1.20957	13.18338	8.651474
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-8.12765	.5473840	.4366951	8.097527
#1	-7.36941	3.952634	-.497040	7.710400
#2	-8.88589	-2.85787	1.370430	8.484655
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/19/07 01:41:23 PM page 1

Method: TRACEV2 Sample Name: IBICSAB Operator:
Run Time: 11/19/07 13:33:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	492010.8	620.5740	105.1851	495.7130	522.8383	972.6260	519624.6
#1	493685.2	624.3761	107.5199	496.1964	524.4517	974.9890	521546.1
#2	490336.5	616.7718	102.8504	495.2297	521.2247	970.2631	517703.0
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	504.1141	517.4855	558.6974	205318.6	50.04857	515499.0	547.1379
#1	506.3749	518.7194	561.0452	205996.6	50.08470	517294.1	548.7860
#2	501.8533	516.2515	556.3496	204640.5	50.01242	513704.0	545.4898
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	547.1310	958.6871	5857.285	57.36089	227.5303	10468.92	89.51250
#1	548.5112	960.3081	5879.439	59.49707	228.3905	10465.20	89.45338
#2	545.7509	957.0662	5835.130	55.22471	226.6701	10472.65	89.57161
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	537.2209	1079.197	1102.436	1039.197	1147.661	1047.264	57.33183
#1	539.1749	1083.788	1105.055	1039.039	1149.666	1049.969	54.50719
#2	535.2668	1074.606	1099.816	1039.356	1145.657	1044.559	60.15646
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	46.40684	53.03871	59.52187	569.6108
#1	47.87337	51.54038	63.47531	572.2810
#2	44.94031	54.53704	55.56844	566.9407
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: LR Operator:
Run Time: 11/19/07 13:41:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	200.7191	5049.816	2091.323	9629.276	521.3761	2036.410	255.2462
#1	210.6753	5019.582	2082.845	9532.865	521.6544	2028.371	281.8070
#2	190.7628	5080.051	2099.802	9725.688	521.0978	2044.450	228.6854
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	10419.30	Q10699.28	Q10633.08	Q530210.5	20703.17	97.47585	Q10530.11
#1	10379.48	Q10707.12	Q10600.36	Q529712.0	20745.95	112.5011	Q10539.00
#2	10459.11	Q10691.43	Q10665.80	Q530709.0	20660.39	82.45059	Q10521.22
Errors	QC Pass	QC Fail	QC Fail	QC Fail	QC Pass	NOCHECK	QC Fail
Value	10000.00	10000.00	10000.00	500000.0	20000.00		10000.00
Range	5.000000	5.000000	5.000000	5.000000	5.000000		5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	10420.33	7569.350	21.05065	2093.033	Q1074.188	327.8522	2039.010
#1	10397.84	7537.588	16.75852	2098.327	Q1073.177	293.9383	2020.981
#2	10442.81	7601.110	25.34277	2087.739	Q1075.200	361.7661	2057.039
Errors	NOCHECK	QC Pass	NOCHECK	QC Pass	QC Fail	NOCHECK	QC Pass
Value		7500.000		2000.000	1000.000		2000.000
Range		5.000000		5.000000	5.000000		5.000000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	Q10803.24	3121.248	5150.748	10168.00	11220.78	20947.43	20527.39
#1	Q10799.13	3121.365	5135.890	10103.60	11278.18	20860.40	20600.22
#2	Q10807.36	3121.131	5165.606	10232.40	11163.40	Q21034.46	20454.56
Errors	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	10000.00	3000.000	5000.000	10000.00		20000.00	
Range	5.000000	5.000000	5.000000	5.000000		5.000000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	20791.07	2071.646	2103.728	10862.12
#1	20818.82	2077.485	2108.749	10864.79
#2	20763.31	2065.806	2098.707	10859.44
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

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Method: TRACEV2 Sample Name: CVCCV3 Operator:
Run Time: 11/19/07 13:55:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	50746.01	506.6549	515.8490	485.1790	51.64201	500.6520	99941.97
#1	50868.54	507.3496	518.3572	487.4767	51.39491	499.6884	99666.99
#2	50623.48	505.9602	513.3408	482.8813	51.88911	501.6156	100216.9
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	509.7345	520.0139	520.6237	51150.41	515.6869	101034.6	523.6748
#1	508.6593	517.2191	519.8261	51010.87	514.3654	100676.9	521.2767
#2	510.8097	522.8087	521.4213	51289.95	517.0084	101392.3	526.0728
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	506.4725	496.9564	24414.16	520.7015	533.8747	99586.73	498.3815
#1	506.0515	496.3386	24394.98	517.8612	532.5725	99838.95	499.4292
#2	506.8934	497.5742	24433.35	523.5417	535.1769	99334.53	497.3339
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	525.8320	528.3413	527.9750	516.1628	544.6199	516.8130	514.9003
#1	524.2889	526.5369	527.4296	513.4846	542.4029	516.2685	513.7108
#2	527.3751	530.1458	528.5203	518.8412	546.8370	517.3575	516.0898
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	516.0814	515.1050	523.4996	528.7116
#1	514.6939	512.5093	520.5371	526.4229
#2	517.4688	517.7006	526.4622	531.0003
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/19/07 14:06:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	20.80711	.6366299	3.267025	.0973206	-.335202	-.004549	150.5421
#1	32.48561	-.003964	3.564869	.1495567	-.310785	.1323643	148.3649
#2	9.128612	1.277224	2.969181	.0450845	-.359618	-.141462	152.7192
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.156715	.3528757	3.433285	17.78909	.1103671	21.06347	.0630907
#1	-.021995	.5896053	3.112302	25.89903	.1589282	33.39519	.1143123
#2	-.291434	.1161461	3.754268	9.679147	.0618059	8.731756	.0118691
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-9.68000	.2651653	25.79818	-.430190	-.081793	25.99342	-3.30515
#1	-9.40995	.5605019	25.90236	-.218579	.0112959	38.08271	-2.74668
#2	-9.95005	-.030171	25.69400	-.641802	-.174881	13.90412	-3.86363
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0548210	.4927287	1.787850	2.195029	-.531159	.2665491	-.420748
#1	.3425043	.5758353	1.771200	2.177674	-1.93172	.3530389	.9013182
#2	-.232862	.4096221	1.804500	2.212385	.8694032	.1800593	-1.74281
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	.3758254	-4.77461	1.741916	.2274971
#1	-.212365	-3.09209	1.218077	.2825242
#2	.9640156	-6.45712	2.265756	.1724701
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BLK 113 Operator:
Run Time: 11/19/07 14:15:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	21.48706	.7811769	2.891959	.0299879	-.311702	-.061182	157.6368
#1	19.92231	1.979494	3.705121	.0142237	-.316048	-.286270	158.3669
#2	23.05181	-.417140	2.078798	.0457521	-.307357	.1639055	156.9068
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	.9025588	-.190196	2.947668	6.085746	.9982419	4.561217	.0195372
#1	.9090575	-.228101	2.721538	-2.70341	.3311611	3.392647	.0069931
#2	.8960601	-.152291	3.173799	14.87490	1.665323	5.729788	.0320813
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-10.7157	-1.07374	9.741016	.0530979	-.118753	287.6646	-5.00766
#1	-12.2614	-.889532	11.25379	.0136578	.0774924	277.3929	-3.92565
#2	-9.16997	-1.25796	8.228246	.0925379	-.314998	297.9364	-6.08967
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.008512	1.734013	H8.851936	1.757521	-.515122	.5333000	3.657521
#1	-.233914	1.648952	H9.209959	2.048781	-.803370	.6001323	4.394974
#2	.2168906	1.819075	H8.493913	1.466260	-.226874	.4664678	2.920069
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.331493	-7.16470	3.661893	.4103475
#1	-1.70084	-6.38453	3.212648	.4298317
#2	1.037854	-7.94487	4.111139	.3908634
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BKS 113 Operator:
Run Time: 11/19/07 14:34:21
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10299.73	101.7111	106.4229	980.8450	53.08149	106.0107	10563.02
#1	10312.68	98.90268	107.2703	982.2630	52.93637	105.9817	10541.81
#2	10286.79	104.5195	105.5754	979.4269	53.22662	106.0396	10584.23
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	533.1072	543.3981	531.5873	10765.11	1072.888	10542.81	1097.899
#1	531.9348	542.8409	532.0534	10740.05	1070.929	10526.38	1096.238
#2	534.2795	543.9553	531.1211	10790.16	1074.846	10559.25	1099.559
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1037.715	519.4719	10742.23	104.1495	110.3719	10214.10	95.74786
#1	1036.419	518.1893	10764.08	103.3298	110.3766	10198.36	95.30805
#2	1039.010	520.7545	10720.37	104.9693	110.3673	10229.85	96.18767
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	555.6865	1091.601	1031.282	527.9128	584.1749	2110.137	1067.863
#1	555.3541	1089.961	1031.288	526.0806	585.7709	2107.968	1066.153
#2	556.0190	1093.241	1031.277	529.7450	582.5789	2112.305	1069.573
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1075.400	93.44321	109.5027	559.8258
#1	1073.317	93.37749	108.3059	559.2555
#2	1077.483	93.50894	110.6994	560.3961
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: B071115 BE1 Operator:
Run Time: 11/19/07 14:42:42
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	26.44842	.3348405	1.707874	.1709692	-.328201	-.001223	226.3135
#1	27.19992	-.478311	1.667309	.2008037	-.353191	-.005113	229.2795
#2	25.69692	1.147992	1.748439	.1411346	-.303210	.0026662	223.3474
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.6797216	-.227579	3.976726	13.68722	.7130502	7.122372	.3376492
#1	.5446819	-.205166	4.091389	9.155101	.3011869	5.377190	.3768602
#2	.8147612	-.249993	3.862062	18.21933	1.124913	8.867555	.2984382
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-13.2052	-.368963	56.74522	.4348701	-.148840	150461.0	-6.75869
#1	L-15.2615	-.202375	61.12412	1.268377	.2074193	150463.7	-5.87635
#2	-11.1488	-.535550	52.36632	-.398636	-.505099	150458.4	-7.64102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.438261	8.381908	3.500750	1.870344	.4754989	1.262287	4.226764
#1	-.408302	8.513132	3.819019	2.435112	.3396765	1.387830	5.505108
#2	-.468221	8.250686	3.182480	1.305577	.6113214	1.136744	2.948420
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.04390	-10.7000	6.002202	.0994963
#1	-2.30087	-6.32082	5.062869	.1916039
#2	.2130615	-15.0792	6.941535	.0073888
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

Method: TRACEV2 Sample Name: S 711069-001-003-1/1 Operator:
Run Time: 11/19/07 14:51:03
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	34.06101	1.525235	2.822095	73.54212	-.275002	-.031040	3908.489
#1	33.36720	2.074425	2.493037	73.47209	-.289169	-.113416	3901.290
#2	34.75482	.9760441	3.151153	73.61215	-.260835	.0513354	3915.687
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.5347276	.5129797	3.810735	2.720822	1.661867	2927.637	97.28075
#1	.3062407	.3956439	3.570104	-1.37285	1.525834	2919.110	97.18317
#2	.7632145	.6303155	4.051365	6.814499	1.797899	2936.165	97.37833
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	80.88675	12.03900	373.4427	2.604106	.0490126	140335.6	-3.49107
#1	79.69640	12.26474	370.3174	2.791850	.0016243	140179.1	-4.47448
#2	82.07709	11.81327	376.5679	2.416361	.0964008	140492.1	-2.50765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.408129	15.50365	6.105630	.5064369	-.234017	.6327224	4.703206
#1	-.407842	15.36981	5.839813	.4096982	-1.02073	.6150459	3.569152
#2	-.408417	15.63749	6.371447	.6031756	.5526968	.6503988	5.837260
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	.1411011	-4.37055	6.091330	.0603094
#1	.5040793	-5.16330	6.769321	-.112458
#2	-.221877	-3.57780	5.413340	.2330770
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

Method: TRACEV2 Sample Name: SP711069-001-003-1/1 Operator:
Run Time: 11/19/07 14:59:24
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10389.94	102.4554	106.9869	1064.353	52.66753	105.9760	14096.07
#1	10391.57	101.1213	103.8955	1065.218	52.66645	106.0272	14104.86
#2	10388.32	103.7895	110.0782	1063.489	52.66862	105.9248	14087.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	530.6783	540.2522	533.1776	10688.15	1069.080	13328.90	1184.815
#1	531.2883	540.4831	533.6907	10689.80	1072.995	13337.06	1185.862
#2	530.0684	540.0214	532.6644	10686.49	1065.165	13320.73	1183.767
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1127.706	530.8849	11421.69	106.1937	109.6365	151335.0	98.31012
#1	1130.466	532.0719	11419.24	105.4552	109.7461	151491.3	98.66932
#2	1124.947	529.6979	11424.15	106.9322	109.5269	151178.8	97.95092
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	551.2763	1099.606	1039.261	531.6337	582.5712	2117.277	1062.017
#1	551.6702	1100.688	1038.642	530.6099	584.1248	2117.415	1068.169
#2	550.8823	1098.524	1039.879	532.6575	581.0177	2117.139	1055.865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1072.611	98.99432	109.7934	554.9321
#1	1075.408	97.24237	109.5616	555.1659
#2	1069.815	100.7463	110.0251	554.6982
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

Method: TRACEV2 Sample Name: SD711069-001-003-1/1 Operator:
Run Time: 11/19/07 15:07:45
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10730.73	102.3298	106.3887	1064.833	52.80957	106.6883	14236.35
#1	10730.05	102.9865	105.9492	1064.530	52.75801	106.6692	14219.59
#2	10731.41	101.6730	106.8283	1065.135	52.86114	106.7074	14253.12
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	533.7288	542.8433	534.1536	10798.22	1078.439	13461.98	1191.239
#1	533.5964	542.1137	534.9744	10794.05	1076.834	13453.00	1190.694
#2	533.8612	543.5729	533.3328	10802.38	1080.043	13470.95	1191.784
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1130.480	533.8424	11668.17	104.6534	110.4608	151987.3	100.6103
#1	1127.974	531.6757	11683.51	105.1098	110.3558	152065.7	100.1392
#2	1132.986	536.0090	11652.83	104.1970	110.5657	151908.9	101.0814
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	554.7588	1106.964	1038.867	533.2081	585.9085	2142.828	1069.787
#1	554.1152	1106.295	1038.510	531.5771	585.0514	2140.824	1070.014
#2	555.4024	1107.633	1039.223	534.8391	586.7656	2144.832	1069.559
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1082.764	93.94435	110.0079	558.5437
#1	1080.244	93.77023	110.7796	557.8307
#2	1085.285	94.11847	109.2362	559.2567
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

Method: TRACEV2 Sample Name: SE711069-001-003-1/1 Operator:
Run Time: 11/19/07 15:16:06
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	23.89981	1.951648	2.066218	15.23272	-.302509	-.062363	890.5700
#1	25.72296	2.260650	.3514784	15.24296	-.314352	-.063852	895.3227
#2	22.07666	1.642646	3.780958	15.22247	-.290665	-.060874	885.8173
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.7284653	.6115812	3.112697	10.30146	1.320712	613.3438	20.01723
#1	.9542237	.9153755	3.276737	4.636752	.7413107	615.7112	20.05863
#2	.5027069	.3077868	2.948657	15.96617	1.900113	610.9763	19.97582
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7.162093	2.194976	73.95966	1.358716	.0416861	28604.84	-5.15712
#1	7.976065	2.263484	76.63356	1.321646	-.131372	28566.83	-7.02237
#2	6.348122	2.126469	71.28577	1.395786	.2147438	28642.85	-3.29188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.206466	8.779982	3.102265	1.258149	1.121216	.5987929	2.619363
#1	-.005850	8.796764	3.634669	1.643289	2.553795	.7693882	3.023853
#2	-.407082	8.763198	2.569861	.8730090	-.311363	.4281976	2.214873
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	.6712899	-3.16423	3.620090	.0270195
#1	-.400056	-4.31341	4.139070	.2974422
#2	1.742636	-2.01506	3.101110	-.243403
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report 11/19/07 03:35:32 PM page 1

Method: TRACEV2 Sample Name: BLK 116 Operator:
Run Time: 11/19/07 15:27:17
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	27.46525	.3717072	2.238179	.0484638	-.327292	-.064978	221.3960
#1	26.05217	.2497197	2.319541	.0489004	-.327089	-.127700	218.8172
#2	28.87832	.4936947	2.156817	.0480273	-.327494	-.002257	223.9748
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	H2.570135	-1.75379	2.914799	21.77041	H6.089187	3.960138	.3135970
#1	H2.801716	-1.57433	2.525040	17.60760	H5.591590	3.608127	.2486117
#2	2.338554	-1.93324	3.304559	25.93321	H6.586783	4.312149	.3785823
Errors	LC High	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-12.6562	-2.13620	28.01741	-.276357	.0766718	690.9125	-12.7459
#1	-13.7335	-2.25067	27.16384	.0364301	.0650091	665.4404	-10.9060
#2	-11.5789	-2.02172	28.87098	-.589143	.0883345	716.3846	-14.5858
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0299793	7.791235	3.613920	1.195996	H29.96320	.5423046	12.63701
#1	-.175621	7.765776	3.674197	.9425770	H30.98462	.5583700	13.13274
#2	.2355793	7.816694	3.553642	1.449415	H28.94177	.5262392	12.14128
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	2.815180	-21.7985	10.48462	.3417746
#1	1.820923	-23.1279	11.61846	.4372687
#2	3.809438	-20.4692	9.350786	.2462804
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BKS 116 Operator:
Run Time: 11/19/07 15:35:38
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10153.41	96.00256	100.7148	996.7765	53.65375	105.0032	10468.92
#1	10161.91	96.72263	101.0371	997.0926	53.60883	104.8356	10463.39
#2	10144.92	95.28248	100.3924	996.4603	53.69867	105.1707	10474.45
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	537.8395	536.1539	539.1324	10764.19	1061.287	10255.65	1098.572
#1	537.8558	535.3611	538.7075	10763.37	1059.909	10257.62	1097.496
#2	537.8233	536.9466	539.5574	10765.02	1062.665	10253.68	1099.648
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1046.070	516.4286	9660.760	93.92461	107.8467	10271.41	92.92436
#1	1044.759	516.3350	9677.670	93.06704	108.2158	10325.82	96.19131
#2	1047.381	516.5223	9643.850	94.78219	107.4776	10217.00	89.65742
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	557.5009	1069.947	989.9717	529.2974	598.8906	2114.617	1060.297
#1	556.8090	1068.307	989.4905	528.5958	598.7463	2113.448	1059.113
#2	558.1926	1071.588	990.4528	529.9990	599.0349	2115.786	1061.481
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1061.781	75.99603	102.8889	561.0559
#1	1060.306	74.00220	102.5995	560.3843
#2	1063.256	77.98985	103.1783	561.7276
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711099-001-001-1/1 Operator:
Run Time: 11/19/07 15:43:59
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	109197.8	4.644382	28.45678	342.0191	4.572520	3.564040	9531.489
#1	109252.3	6.090653	29.54460	342.0498	4.573266	3.580900	9523.815
#2	109143.2	3.198113	27.36896	341.9884	4.571775	3.547180	9539.163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	123.8415	95.12553	112.8197	248203.7	338.8137	4042.190	2426.178
#1	124.0212	95.41434	112.9907	247967.1	338.1568	4040.746	2424.604
#2	123.6618	94.83673	112.6487	248440.3	339.4706	4043.634	2427.751
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	2359.469	42.19537	3738.070	10.86851	-1.08814	1053.459	-5.98762
#1	2355.702	41.91953	3744.073	10.81025	-1.08793	1078.307	-4.60674
#2	2363.236	42.47121	3732.068	10.92677	-1.08835	1028.610	-7.36851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	290.4003	273.1581	8.807389	11.03081	29.84350	912.6119	343.5676
#1	290.3095	273.3771	8.964844	10.91756	29.13663	909.4543	344.6990
#2	290.4910	272.9391	8.649935	11.14406	30.55037	915.7696	342.4362
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	336.4366	-10.8241	21.71472	292.9069
#1	334.8856	-9.21122	20.82086	293.1845
#2	337.9877	-12.4371	22.60857	292.6292
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CVCCV3 Operator:
Run Time: 11/19/07 15:55:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51130.93	512.1588	530.6363	484.5108	53.22818	508.5923	102346.7
#1	51122.87	511.7088	529.5371	483.1125	53.35548	508.3054	102506.6
#2	51138.99	512.6086	531.7355	485.9091	53.10088	508.8792	102186.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	517.5986	537.2476	532.5275	52503.49	528.0741	103629.4	538.9412
#1	518.5263	537.9570	533.0414	52575.18	528.4491	103820.7	539.7823
#2	516.6710	536.5380	532.0136	52431.81	527.6990	103438.1	538.0999
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	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	514.9703	503.4540	24834.99	536.5226	547.7223	99707.04	504.9149
#1	515.2364	503.6987	24881.44	535.7590	549.2029	99900.61	504.5278
#2	514.7042	503.2093	24788.55	537.2861	546.2417	99513.47	505.3020
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	541.0764	542.3727	535.2560	520.5597	Q567.3516	528.3486	525.8967
#1	541.7084	543.4001	535.1973	518.1743	Q569.8622	528.8226	528.1221
#2	540.4445	541.3454	535.3148	522.9450	Q564.8409	527.8746	523.6713
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	529.1641	526.7589	541.4044	547.3993
#1	528.6139	527.7669	539.7551	548.3998
#2	529.7142	525.7508	543.0538	546.3988
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/19/07 16:03:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	22.75676	.5271997	2.705115	.0385493	-.329704	-.024632	141.2493
#1	24.89934	.6021163	3.926084	.0254834	-.342050	-.111450	146.1022
#2	20.61418	.4522830	1.484146	.0516151	-.317359	.0621859	136.3965
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.009236	.0660071	2.766766	12.98050	.4218945	21.76762	.0961223
#1	-.075262	.2403738	2.625016	19.02040	1.931033	26.51388	.1096681
#2	.0567892	-.108360	2.908516	6.940595	-1.08724	17.02137	.0825765
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-9.96662	-.298032	26.43658	1.698597	.0418325	26.73614	-2.50473
#1	-11.7740	-.486076	29.54705	1.774019	-.222754	41.44951	-3.32040
#2	-8.15922	-.109989	23.32612	1.623175	.3064192	12.02277	-1.68905
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.062576	.4261942	.3055925	2.632561	-.179680	.0306899	1.104111
#1	.0522558	.5223736	-.017623	3.411491	.3097131	.0952152	.9137085
#2	-.177408	.3300148	.6288077	1.853632	-.669073	-.033835	1.294514
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	.0806894	-1.80102	3.448308	.1964968
#1	2.439597	-1.31937	3.320612	.3571044
#2	-2.27822	-2.28268	3.576003	.0358893
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: CVCCV3 Operator:
Run Time: 11/19/07 16:28:17
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51285.67	514.0757	525.8060	486.8896	52.82511	507.0995	101976.9
#1	51318.36	515.2458	526.3243	487.3944	52.82618	507.1111	102063.9
#2	51252.98	512.9057	525.2877	486.3847	52.82404	507.0878	101890.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	516.8339	532.2301	531.9950	52235.43	525.1061	103096.2	536.1646
#1	517.1607	532.5140	532.6280	52280.51	528.0596	103171.5	536.7732
#2	516.5071	531.9462	531.3619	52190.35	522.1525	103020.9	535.5560
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	511.0474	501.9753	24790.03	534.3317	547.3109	100273.7	505.5675
#1	512.2244	502.3311	24785.56	534.1898	548.1658	100318.8	508.8896
#2	509.8703	501.6195	24794.50	534.4737	546.4559	100228.6	502.2454
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	538.4816	540.3796	532.3774	520.5460	Q560.3882	526.9334	524.4684
#1	538.7452	541.2169	531.7872	518.6417	Q561.8953	527.5742	524.7887
#2	538.2180	539.5422	532.9678	522.4504	Q558.8812	526.2924	524.1481
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	525.4260	526.2079	538.3936	543.4166
#1	529.6962	529.6329	536.4681	543.7390
#2	521.1559	522.7830	540.3190	543.0942
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/19/07 16:36:38
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	27.40985	.5276524	1.572621	.0512397	-.292566	.0750266	139.6718
#1	29.14531	1.777208	1.199566	.0685036	-.290897	.1162123	153.1312
#2	25.67438	-.721903	1.945675	.0339757	-.294235	.0338409	126.2123
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.0127068	.4740473	2.595692	14.15021	-.595804	29.19690	.1212181
#1	-.029422	.6597745	2.906794	18.24334	-.815778	39.42063	.1854605
#2	.0548353	.2883201	2.284591	10.05708	-.375830	18.97316	.0569757
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-10.9418	-.319049	21.65968	2.806886	.0997573	113.7482	-3.78063
#1	-10.6685	-.863739	22.50758	3.470612	.2390837	114.7468	-.591844
#2	-11.2151	.2256418	20.81179	2.143160	-.039569	112.7497	-6.96941
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0502013	.4242729	.8281434	2.481966	1.221955	.0982978	.9524863
#1	-.061825	.4403743	.6854671	2.897953	1.739314	.1756956	.2542097
#2	.1622273	.4081715	.9708195	2.065980	.7045965	.0209000	1.650763
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.37005	-1.26335	4.841903	.2409315
#1	-1.35087	-.265127	5.338382	.2697774
#2	-1.38922	-2.26157	4.345424	.2120857
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: S 711099-002-002-1/1 Operator:
Run Time: 11/19/07 16:44:59
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	107900.9	1.448149	24.22809	445.4626	6.081261	.4095879	6274.376
#1	108073.8	1.945035	25.72653	445.9499	6.071204	.3417454	6266.922
#2	107728.0	.9512622	22.72965	444.9754	6.091317	.4774303	6281.830
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	84.85066	56.73819	73.16003	167619.7	169.8744	5805.292	1746.191
#1	85.23297	56.47556	73.06002	167445.7	168.3337	5802.801	1744.878
#2	84.46834	57.00083	73.26003	167793.7	171.4152	5807.784	1747.503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1704.003	27.49107	6441.528	4.612579	L-3.12510	1118.814	-3.73944
#1	1700.281	27.77867	6451.588	5.776829	L-3.33263	1104.515	-3.85264
#2	1707.726	27.20347	6431.469	3.448329	-2.91758	1133.113	-3.62624
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	312.3156	172.6441	4.518206	9.884399	27.88333	951.9231	174.8986
#1	312.0565	172.6602	4.567141	9.640988	28.51825	953.1177	174.9466
#2	312.5748	172.6280	4.469271	10.12781	27.24842	950.7284	174.8507
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	167.3623	-19.1428	16.49014	309.9798
#1	165.0271	-17.5381	17.43417	309.7834
#2	169.6975	-20.7475	15.54612	310.1762
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711099-003-003-1/1 Operator:
Run Time: 11/19/07 16:55:29
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	95858.66	3.055345	24.96913	408.1958	5.030129	1.775271	9317.316
#1	95831.73	1.868259	26.85900	408.5869	5.045664	1.721401	9323.083
#2	95885.58	4.242431	23.07925	407.8048	5.014593	1.829142	9311.551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	100.7754	42.78577	85.12080	169539.5	212.6641	5070.571	1508.041
#1	101.0840	42.95410	85.10644	169697.1	212.4562	5073.518	1508.874
#2	100.4669	42.61744	85.13516	169381.9	212.8720	5067.626	1507.208
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1475.587	24.44912	5274.138	4.676747	-.205473	927.2417	-8.52918
#1	1476.693	25.09535	5278.234	3.507340	-.251574	973.1704	-5.98252
#2	1474.482	23.80289	5270.042	5.846154	-.159372	881.3130	-11.0758
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	267.7312	193.1079	7.000791	8.291381	27.25102	1087.948	220.7397
#1	268.0055	193.3059	6.845711	8.068915	26.40971	1087.414	221.6381
#2	267.4569	192.9098	7.155870	8.513846	28.09233	1088.482	219.8412
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	208.6262	-14.2775	14.15374	266.9966
#1	207.8651	-15.4294	12.97559	267.3271
#2	209.3872	-13.1255	15.33189	266.6662
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711099-004-004-1/1 Operator:
Run Time: 11/19/07 17:03:50
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	100398.0	5.954373	32.55452	582.2836	4.687061	3.467158	15960.31
#1	100424.4	5.735455	31.74647	582.2681	4.682350	3.343437	15944.54
#2	100371.7	6.173292	33.36257	582.2991	4.691772	3.590879	15976.09
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	159.7538	38.47959	139.3660	162946.7	411.0391	7497.898	1317.496
#1	159.5090	38.51035	139.5883	162821.0	408.5127	7492.044	1316.687
#2	159.9986	38.44884	139.1438	163072.3	413.5655	7503.751	1318.305
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1303.322	39.93227	5179.028	4.756832	1.139924	1026.455	-5.82624
#1	1303.652	40.21730	5186.010	4.508799	1.187361	1004.180	-5.94044
#2	1302.993	39.64722	5172.047	5.004866	1.092487	1048.731	-5.71203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	264.2105	295.7102	10.44390	8.638659	25.95386	1175.992	416.7708
#1	264.0798	295.7447	10.66098	8.231683	26.58476	1176.529	415.7600
#2	264.3412	295.6757	10.22682	9.045633	25.32296	1175.456	417.7816
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	408.1732	-15.8859	15.07810	262.6085
#1	404.8890	-17.6043	15.56526	262.9889
#2	411.4574	-14.1675	14.59094	262.2282
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711099-005-005-1/1 Operator:
Run Time: 11/19/07 17:12:11
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	124263.6	1.379801	21.83915	413.8122	6.678498	-.464575	15350.10
#1	124297.4	.6843753	22.11570	413.5958	6.668353	-.282032	15373.21
#2	124229.7	2.075228	21.56259	414.0286	6.688643	-.647118	15327.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	122.6239	52.42039	109.8559	231693.6	167.4782	6442.679	1967.654
#1	122.3577	52.24381	110.2129	232090.7	167.8781	6458.540	1973.186
#2	122.8902	52.59698	109.4989	231296.4	167.0783	6426.817	1962.122
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1957.701	32.79057	8459.887	5.558105	-2.84019	1282.622	-7.22808
#1	1959.239	32.79063	8474.554	6.563835	-2.79954	1294.867	-7.50078
#2	1956.163	32.79050	8445.221	4.552375	-2.88084	1270.377	-6.95538
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	316.9576	206.5268	6.760798	4.600480	25.70823	1051.361	173.9297
#1	318.0787	206.7569	7.024854	4.352557	27.11686	1054.127	175.0579
#2	315.8366	206.2967	6.496743	4.848402	24.29960	1048.595	172.8015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	164.2524	-13.2863	14.98021	315.8147
#1	164.2881	-15.2225	17.45688	317.0976
#2	164.2167	-11.3502	12.50355	314.5318
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711099-006-006-1/1 Operator:
Run Time: 11/19/07 17:20:33
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	102024.9	2.167745	25.37963	394.9519	5.511596	.5538359	8763.877
#1	102076.9	3.200041	26.04309	394.8435	5.535497	.6206627	8788.504
#2	101972.9	1.135449	24.71617	395.0603	5.487696	.4870090	8739.250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	136.8739	52.47531	104.4100	200405.0	200.6350	6830.980	1676.599
#1	137.2788	52.66079	104.9110	200874.3	201.0167	6850.082	1681.807
#2	136.4690	52.28983	103.9091	199935.6	200.2533	6811.877	1671.391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1659.188	38.13023	7270.236	1.640491	-2.10211	1212.108	-4.62521
#1	1663.420	38.04302	7274.186	1.696393	-2.26893	1189.833	-4.33308
#2	1654.956	38.21743	7266.287	1.584589	-1.93528	1234.383	-4.91733
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	275.2272	222.8021	6.997719	5.273672	24.89888	1040.762	206.5382
#1	275.7109	223.8059	6.457698	5.765252	25.54740	1043.932	206.5598
#2	274.7434	221.7982	7.537740	4.782091	24.25035	1037.591	206.5165
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	197.6833	-19.3017	12.11148	274.5801
#1	198.2450	-19.9906	12.53980	275.4096
#2	197.1216	-18.6128	11.68315	273.7505
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report 11/19/07 05:37:09 PM

Method: TRACEV2 Sample Name: SP711099-006-006-1/1 Operator:
Run Time: 11/19/07 17:28:54
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	211111.0	55.49291	117.1354	1494.343	58.62481	101.8817	21491.70
#1	210704.2	58.18735	116.7688	1498.665	58.01846	101.1660	21320.03
#2	211517.8	52.79847	117.5021	1490.022	59.23117	102.5974	21663.38
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	700.9973	571.5225	638.5478	213260.3	1304.451	18920.53	2820.665
#1	697.5677	565.2336	633.6323	211377.4	1291.623	18730.36	2788.777
#2	704.4270	577.8112	643.4633	215143.2	1317.280	19110.71	2852.553
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	2771.630	563.5398	16863.32	92.16753	102.6380	10802.56	91.75078
#1	2752.522	562.3132	16734.61	89.92351	101.6073	10840.02	92.70377
#2	2790.737	564.7663	16992.03	94.41155	103.6687	10765.11	90.79779
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	852.6939	1304.753	878.6307	503.0225	554.3563	2905.873	1301.529
#1	844.3662	1291.478	873.2965	500.7575	543.2937	2890.054	1291.011
#2	861.0216	1318.029	883.9650	505.2875	565.4189	2921.691	1312.046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1305.913	70.35889	103.0717	851.2691
#1	1291.930	67.03873	101.3658	843.4232
#2	1319.896	73.67904	104.7777	859.1150
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SD711099-006-006-1/1 Operator:
Run Time: 11/19/07 17:37:14
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	221685.6	54.03433	114.9617	1433.401	60.01036	102.5146	19659.29
#1	221428.1	52.98611	115.6857	1437.837	59.30985	101.1768	19470.41
#2	221943.1	55.08255	114.2377	1428.965	60.71086	103.8523	19848.16
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	692.4686	595.3955	644.3230	244420.1	1252.134	19350.92	3237.383
#1	687.9707	587.7098	639.1536	241956.6	1241.687	19125.86	3197.027
#2	696.9665	603.0812	649.4924	246883.6	1262.581	19575.98	3277.740
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	3151.470	564.7933	17483.66	93.77559	103.6749	10818.59	93.12368
#1	3129.282	561.7160	17347.32	92.57624	102.3631	10867.38	93.77142
#2	3173.657	567.8707	17619.99	94.97495	104.9868	10769.79	92.47594
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	903.6134	1301.320	878.7122	500.5363	572.4670	2798.166	1249.182
#1	893.4577	1286.954	872.0872	497.2876	560.9653	2782.390	1237.560
#2	913.7692	1315.686	885.3372	503.7850	583.9686	2813.941	1260.805
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1253.610	69.38116	105.9727	902.4424
#1	1243.751	69.10846	104.3100	892.8557
#2	1263.469	69.65386	107.6354	912.0290
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: PS711099-006-006-1/1 Operator:
Run Time: 11/19/07 17:45:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	103154.2	77.89296	100.7676	407.6231	16.12249	22.53483	14050.26
#1	102984.2	76.14586	101.6676	406.1935	16.11242	22.77058	14017.34
#2	103324.3	79.64005	99.86761	409.0528	16.13257	22.29908	14083.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	161.3353	86.76627	140.0519	209475.2	287.8255	12027.10	1835.977
#1	160.8955	86.68862	140.2242	209074.7	286.2264	12018.27	1833.645
#2	161.7751	86.84392	139.8797	209875.6	289.4246	12035.94	1838.310
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1777.104	80.11732	12183.99	70.14208	41.49414	5843.257	91.03736
#1	1769.952	79.73226	12202.89	71.68675	41.57634	5830.292	89.59599
#2	1784.257	80.50239	12165.08	68.59740	41.41194	5856.221	92.47873
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	307.8641	314.5808	78.19480	37.31247	140.0367	1081.326	292.4707
#1	307.4899	314.2201	78.28499	37.72242	140.4133	1076.533	293.4464
#2	308.2383	314.9415	78.10461	36.90251	139.6601	1086.118	291.4951
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	285.5028	49.69790	80.36405	308.2196
#1	282.6163	49.32274	82.86864	308.2154
#2	288.3894	50.07306	77.85947	308.2239
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SE711099-006-006-1/1 Operator:
Run Time: 11/19/07 17:53:56
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	21354.61	1.405286	6.587935	78.73506	.8832509	.5292618	1949.469
#1	21491.25	2.202918	6.900932	79.67127	.9282344	.5048533	1933.742
#2	21217.97	.6076531	6.274939	77.79886	.8382674	.5536704	1965.196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	28.82310	11.21262	23.94526	42266.18	43.39384	1509.591	352.4890
#1	28.88065	11.34596	23.78948	42275.46	42.87837	1510.306	351.8700
#2	28.76555	11.07928	24.10103	42256.91	43.90931	1508.877	353.1081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	334.8705	8.661869	1540.239	1.221559	-.481219	334.8884	-3.34094
#1	340.3396	8.727667	1536.012	-.923924	-.276056	322.3712	-.307789
#2	329.4015	8.596070	1544.465	3.367043	-.686382	347.4055	-6.37409
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	57.28028	48.50695	2.561786	1.359749	4.576646	213.1589	44.38318
#1	57.15980	48.54760	2.726846	.8702036	4.323046	214.9661	44.09111
#2	57.40076	48.46630	2.396725	1.849294	4.830246	211.3516	44.67525
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	42.89908	-4.47165	4.068065	57.35583
#1	42.27190	-9.03078	3.129401	56.95359
#2	43.52625	.0874746	5.006728	57.75806
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: BLK 096 Operator:
Run Time: 11/19/07 18:05:08
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	21.31548	.9823672	.6812277	.0104001	-.372470	.1317245	177.2307
#1	25.19115	.9750170	-1.41265	-.037804	-.372581	.1712125	175.7661
#2	17.43982	.9897174	2.775106	.0586042	-.372360	.0922365	178.6953
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	1.546302	-1.93400	3.787752	21.31832	2.900842	.1302791	.2035361
#1	1.115351	-1.96896	3.636471	18.03403	3.082296	-1.12295	.1903308
#2	1.977253	-1.89905	3.939033	24.60261	2.719389	1.383513	.2167415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-13.6699	-2.58774	21.68480	1.795427	-.045792	521.3331	-7.66061
#1	-15.3226	-3.12768	21.28050	4.701754	-.104263	540.0798	-7.85761
#2	-12.0172	-2.04780	22.08910	-1.11090	.0126798	502.5864	-7.46361
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.034587	4.163345	1.126202	.0737208	H28.06010	1.116311	7.764498
#1	-.005573	4.229493	1.086128	.1292648	H27.69111	1.097314	6.936396
#2	-.063602	4.097197	1.166276	.0181767	H28.42909	1.135309	8.592600
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	.4689195	-14.5400	9.963047	.0097648
#1	1.155150	-13.2220	13.66351	.0395716
#2	-.217311	-15.8581	6.262580	-.020042
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CVCCV3 Operator:
Run Time: 11/19/07 18:16:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51794.23	516.8020	527.3789	494.6963	52.78516	508.3020	101701.5
#1	51553.97	512.9308	524.2130	492.3554	52.39796	506.0014	101116.2
#2	52034.50	520.6732	530.5447	497.0372	53.17237	510.6026	102286.9
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	516.1254	532.5912	534.2539	52201.90	525.4143	102939.8	534.3490
#1	513.4051	530.1249	530.8097	51876.81	523.4523	102362.4	531.3520
#2	518.8456	535.0575	537.6981	52526.99	527.3763	103517.2	537.3461
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	512.9795	505.6134	25031.20	535.5620	547.8715	101691.4	509.0034
#1	509.3237	503.4832	24920.34	532.4484	544.8021	101332.3	507.1707
#2	516.6353	507.7437	25142.06	538.6755	Q550.9409	102050.6	510.8361
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	537.3981	540.4535	535.5897	522.1318	Q558.8881	529.4474	525.1027
#1	534.3292	537.5947	532.5212	515.2078	Q553.9153	526.6567	523.2690
#2	540.4670	543.3123	538.6582	529.0558	Q563.8609	532.2380	526.9364
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	525.5713	529.1617	538.7620	542.8202
#1	523.5451	525.1573	536.0938	539.8727
#2	527.5975	533.1660	541.4302	545.7678
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/19/07 18:24:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	23.98023	-.567747	.7278772	.0758160	-.324717	.1106074	157.5024
#1	24.52914	-.317677	.6642533	.1024307	-.293660	.2046172	159.8481
#2	23.43131	-.817816	.7915011	.0492013	-.355774	.0165976	155.1567
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.0108898	.3459002	3.171127	14.10088	-.526094	32.13986	.0953325
#1	.0546916	.4040837	3.168659	22.93670	-1.04761	39.19415	.1837465
#2	-.032912	.2877168	3.173595	5.265065	-.004579	25.08556	.0069184
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-9.08049	.0514633	23.61051	-.254374	.1558523	113.2808	-.802171
#1	-6.63161	.5880777	25.93551	.4312677	.1211044	164.9935	1.642668
#2	-11.5294	-.485151	21.28551	-.940015	.1906001	61.56814	-3.24701
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0780036	2.512331	.4954113	2.313365	-.780036	.0731466	.1157152
#1	.2196464	2.385962	.3879909	2.394818	-1.51216	.0577963	-.080877
#2	-.063639	2.638699	.6028317	2.231912	-.047913	.0884970	.3123078
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.847096	-1.37909	.3078886	.3106228
#1	-1.53107	-.415862	.8547350	.3988756
#2	-.163118	-2.34233	-.238958	.2223700
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/19/07 08:02:13 PM

Operator:

Method: TRACEV2 Sample Name: CVCCV3
Run Time: 11/19/07 19:53:58
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	50665.19	508.9722	519.1504	486.7372	51.67271	499.6621	99481.38
#1	50863.91	510.0054	521.5375	486.7031	51.88248	500.2053	99760.44
#2	50466.48	507.9389	516.7632	486.7713	51.46295	499.1188	99202.31
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	504.3900	520.1798	520.6947	51087.27	513.9020	100398.3	521.7215
#1	504.9519	522.4062	523.7459	51258.78	516.3741	100827.2	523.7754
#2	503.8281	517.9534	517.6435	50915.75	511.4300	99969.48	519.6676
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	505.3643	495.0890	24468.62	524.9393	533.6907	99159.20	497.7144
#1	506.2683	494.2103	24616.41	527.9631	535.6528	99703.33	496.9588
#2	504.4603	495.9676	24320.83	521.9154	531.7286	98615.09	498.4700
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	524.6003	527.2755	523.5781	511.7335	546.2640	517.0652	514.3470
#1	526.1023	529.4605	524.7417	511.6464	549.6624	519.3042	517.3154
#2	523.0984	525.0906	522.4145	511.8206	542.8657	514.8263	511.3786
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	513.6808	520.8869	526.9653	529.6499
#1	515.9047	525.2067	529.3412	531.7417
#2	511.4568	516.5671	524.5895	527.5581
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB3 Operator:
Run Time: 11/19/07 20:02:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	27.59914	-.340422	2.503614	.1921275	-.122733	.1182949	63.83460
#1	32.06661	.4349004	1.314867	.2057763	-.146838	.2139137	75.89387
#2	23.13167	-1.11574	3.692362	.1784788	-.098628	.0226761	51.77532
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.2092931	.3736131	1.054788	23.35728	.7250230	37.39027	.1864881
#1	.2971602	.3165793	.8989558	19.05549	-.137210	45.11460	.1984932
#2	.1214260	.4306469	1.210621	27.65907	1.587256	29.66595	.1744830
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-3.62936	.7225268	22.50946	1.959729	-.034418	163.4649	-2.83574
#1	-6.03115	.2302308	31.30352	1.794585	.1790540	246.1994	-7.13048
#2	-1.22757	1.214823	13.71539	2.124873	-.247890	80.73035	1.458997
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2891972	1.166192	-.266736	1.218831	-.060973	.1344997	.0066612
#1	.4288004	1.146897	.0192121	1.764406	2.626827	.2392761	-.683422
#2	.1495940	1.185486	-.552684	.6732562	-2.74877	.0297234	.6967441
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1.084110	-.118953	2.998973	.5760995
#1	.1358001	-.213625	2.798593	1.087968
#2	2.032419	-.024280	3.199353	.0642308
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report

Method: TRACEV2 Sample Name: BKS 096 Operator:
Run Time: 11/19/07 20:10:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	9975.502	97.47021	95.58737	1002.590	50.15684	100.2031	9758.609
#1	9982.837	96.43010	96.62088	1003.650	50.18375	100.0757	9762.065
#2	9968.168	98.51032	94.55386	1001.530	50.12993	100.3305	9755.153
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	511.1552	498.2722	512.5847	10121.55	993.2545	9563.809	1016.567
#1	511.4064	498.8814	513.1041	10121.90	992.9841	9571.663	1017.258
#2	510.9040	497.6629	512.0654	10121.21	993.5249	9555.955	1015.876
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1002.181	495.5528	9369.680	90.86806	102.0084	10109.26	89.54548
#1	1001.382	495.5903	9377.366	89.45727	102.2057	10086.31	90.19178
#2	1002.980	495.5153	9361.994	92.27884	101.8111	10132.21	88.89918
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	521.1230	1001.934	948.1439	510.9763	543.5691	2048.908	998.3375
#1	521.6548	1002.577	948.5044	510.4635	543.6386	2049.402	998.9305
#2	520.5912	1001.291	947.7835	511.4891	543.4995	2048.414	997.7446
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	990.7129	75.95539	98.32439	521.3632
#1	990.0108	74.42902	96.97141	521.9172
#2	991.4150	77.48176	99.67738	520.8091
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

Method: TRACEV2 Sample Name: S 711033-003-005-1/2 Operator:
Run Time: 11/19/07 20:19:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	186611.9	5.949882	27.10765	763.4490	2.684548	1.715727	45925.47
#1	186774.2	4.639124	27.60454	763.3537	2.678793	2.057816	45893.20
#2	186449.5	7.260639	26.61076	763.5442	2.690303	1.373638	45957.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	590.3440	265.4787	671.7418	367073.6	358.6653	92345.16	9375.718
#1	590.2744	264.7999	672.6556	366853.9	358.1202	92302.31	9368.883
#2	590.4136	266.1574	670.8280	367293.2	359.2105	92387.99	9382.553
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	9512.383	523.6730	3901.817	9.999155	-.960298	928.7194	12.17955
#1	9511.103	523.1122	3914.716	9.129019	-1.04030	918.5503	10.34069
#2	9513.663	524.2339	3888.917	10.86929	-.880292	938.8884	14.01840
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1048.201	804.0597	17.04051	4.219848	16.39826	20880.51	377.8982
#1	1047.625	804.4567	18.23286	4.489997	17.52484	20888.88	376.3899
#2	1048.777	803.6626	15.84816	3.949699	15.27168	20872.13	379.4066
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	349.0488	-4.75440	17.37582	1021.947
#1	348.9853	-.763039	14.07494	1021.803
#2	349.1124	-8.74576	20.67670	1022.091
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SP711033-003-005-1/2 Operator:
Run Time: 11/19/07 20:27:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	270946.8	41.74387	105.2135	1839.099	51.39948	96.64581	67874.95
#1	270881.2	41.05757	105.7112	1839.157	51.41428	96.77788	67823.76
#2	271012.4	42.43017	104.7157	1839.041	51.38468	96.51375	67926.13
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1135.801	776.6791	1304.717	402439.3	1314.914	105502.5	H11072.23
#1	1136.153	776.1696	1303.156	402142.9	1315.315	105402.3	H11060.81
#2	1135.450	777.1885	1306.278	402735.8	1314.512	105602.7	H11083.65
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	11307.16	1100.355	14620.39	88.06733	99.68461	10632.33	104.9127
#1	11300.75	1100.659	14614.05	87.34563	99.45715	10675.42	103.0966
#2	11313.56	1100.050	14626.73	88.78902	99.91206	10589.25	106.7288
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1679.006	1829.101	934.9356	408.9240	482.8741	H25762.48	1334.856
#1	1677.412	1827.415	933.2873	409.1549	484.3620	H25751.57	1337.362
#2	1680.600	1830.786	936.5837	408.6932	481.3861	H25773.40	1332.350
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1304.942	73.48966	95.35606	1644.490
#1	1304.291	73.53730	94.24969	1643.466
#2	1305.594	73.44202	96.46242	1645.514
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

Method: TRACEV2 Sample Name: SD711033-003-005-1/2 Operator:
Run Time: 11/19/07 20:35:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	279919.3	40.94418	104.8352	1860.772	51.45610	97.10152	71394.59
#1	279993.1	38.81438	102.8788	1861.122	51.52468	97.33373	71374.28
#2	279845.5	43.07398	106.7916	1860.422	51.38751	96.86931	71414.89
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1162.833	767.3799	1350.388	416312.5	1328.410	109537.0	H11000.65
#1	1162.620	766.7366	1350.733	416330.1	1331.561	109506.8	H10999.51
#2	1163.045	768.0231	1350.043	416294.9	1325.258	109567.1	H11001.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	11223.90	1117.473	14594.20	86.68483	99.44238	10660.68	107.7953
#1	11219.31	1118.435	14593.72	86.72065	99.20721	10694.45	107.6710
#2	11228.49	1116.512	14594.69	86.64900	99.67755	10626.91	107.9197
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1729.509	1867.073	935.5512	404.9789	474.6504	H27623.89	1344.659
#1	1728.431	1867.013	933.6768	403.8430	473.7423	H27622.04	1342.766
#2	1730.586	1867.134	937.4256	406.1147	475.5585	H27625.73	1346.551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1320.285	72.56949	93.74239	1692.633
#1	1325.958	71.78588	94.18793	1691.388
#2	1314.612	73.35310	93.29684	1693.878
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: PS711033-003-005-1/2 Operator:
Run Time: 11/19/07 20:44:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	186063.5	80.59724	98.37857	778.6623	12.09602	19.47528	50012.75
#1	186369.0	80.98598	95.51427	779.4495	12.03906	19.50388	49939.91
#2	185757.9	80.20850	101.2429	777.8752	12.15298	19.44669	50085.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	603.6104	289.9445	693.8446	364084.1	429.0588	95873.50	9332.508
#1	602.9185	288.8162	694.3599	363545.2	427.3254	95740.31	9310.203
#2	604.3022	291.0727	693.3293	364622.9	430.7922	96006.69	9354.812
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	9469.211	556.3018	8540.301	68.23503	38.68366	5696.892	101.9351
#1	9458.016	556.0939	8565.859	69.21463	38.61042	5821.245	99.85277
#2	9480.407	556.5095	8514.741	67.25544	38.75689	5572.540	104.0174
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1053.585	867.9975	81.66662	33.73613	113.7832	20510.51	444.4930
#1	1051.445	867.0343	81.84563	34.05058	112.1971	20509.41	444.2468
#2	1055.725	868.9607	81.48761	33.42167	115.3693	20511.61	444.7392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	421.3416	50.59292	77.05599	1027.507
#1	418.8647	51.76857	77.93756	1026.050
#2	423.8186	49.41727	76.17442	1028.964
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: SE711033-003-005-1/2 Operator:
Run Time: 11/19/07 20:52:27
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	38732.62	1.125338	5.389702	152.1746	.4497443	-.156996	9388.078
#1	38859.39	.4663839	5.390297	153.0121	.4675754	-.273716	9422.308
#2	38605.85	1.784293	5.389106	151.3372	.4319131	-.040277	9353.848
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	120.2230	54.79693	132.0703	75550.45	74.25349	19221.13	1941.631
#1	120.7982	54.87667	132.5604	75829.63	74.23659	19283.57	1947.718
#2	119.6478	54.71717	131.5801	75271.27	74.27039	19158.69	1935.544
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1920.749	108.0578	763.4333	1.933001	-.497317	140.7000	.0708642
#1	1930.153	109.1769	765.2383	2.514000	-.520201	127.1022	-.986208
#2	1911.344	106.9386	761.6282	1.352001	-.474433	154.2977	1.127936
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	210.7265	166.7600	3.771696	.9236306	2.159907	4141.607	77.57903
#1	211.1524	167.2108	3.821334	.6363825	3.577549	4160.148	76.69784
#2	210.3005	166.3092	3.722057	1.210879	.7422652	4123.066	78.46022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	72.59064	-3.62148	4.710144	205.7423
#1	73.00588	-3.32163	5.431718	206.0923
#2	72.17540	-3.92133	3.988569	205.3922
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-004-007-1/2 Operator:
Run Time: 11/19/07 21:00:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	193628.1	4.596601	28.64246	1017.207	3.638037	2.201527	36723.83
#1	193161.1	2.790260	30.34821	1015.817	3.622970	1.810398	36630.42
#2	194095.1	6.402942	26.93670	1018.596	3.653103	2.592655	36817.23
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	493.8343	259.4088	655.7745	341736.8	226.4449	78255.55	H15055.15
#1	493.0464	258.8600	653.8025	340871.9	225.1551	78034.09	H15010.52
#2	494.6223	259.9576	657.7465	342601.8	227.7346	78476.99	H15099.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	15376.31	382.5239	4924.327	10.38834	-1.65545	1031.066	18.36018
#1	15338.62	381.7105	4913.126	10.25146	-1.48045	1083.268	19.68916
#2	15413.99	383.3373	4935.528	10.52521	-1.83045	978.8650	17.03121
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1253.195	758.2173	10.10153	5.471995	16.78749	16716.46	239.8788
#1	1249.235	756.2953	9.080958	5.602027	16.27963	16666.42	240.3608
#2	1257.155	760.1392	11.12210	5.341963	17.29535	16766.49	239.3967
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	219.7278	-8.56992	19.86735	1219.998
#1	217.5521	-4.57126	17.66271	1216.519
#2	221.9035	-12.5686	22.07199	1223.478
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-005-009-1/2 Operator:
Run Time: 11/19/07 21:09:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	238755.7	4.872070	30.30464	666.5373	3.216384	1.029066	49003.30
#1	238978.4	6.593651	32.36050	666.5046	3.227868	1.154194	49012.12
#2	238533.0	3.150490	28.24879	666.5701	3.204899	.9039383	48994.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	952.4581	307.3766	634.5835	422412.5	212.6317	108231.9	7108.702
#1	952.5586	307.6037	635.8522	422700.8	213.4225	108310.3	7115.301
#2	952.3575	307.1496	633.3148	422124.3	211.8409	108153.6	7102.102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7107.241	545.1721	3835.259	7.633985	-1.02277	890.1468	7.035171
#1	7108.776	545.6394	3844.013	8.594214	-.678922	918.8561	4.891083
#2	7105.706	544.7049	3826.505	6.673757	-1.36662	861.4376	9.179260
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1287.899	780.4472	16.46809	5.962837	15.21301	20856.30	227.3886
#1	1289.959	780.9523	17.56121	5.764939	14.11128	20877.49	227.5997
#2	1285.838	779.9421	15.37496	6.160736	16.31474	20835.12	227.1775
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	205.2532	-9.09332	15.99753	1255.840
#1	206.3339	-6.58829	16.18536	1258.336
#2	204.1725	-11.5984	15.80970	1253.343
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-006-011-1/2 Operator:
Run Time: 11/19/07 21:17:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	230555.6	8.193211	93.71643	1314.018	17.07042	8.085156	22331.81
#1	230457.8	10.64575	95.17481	1314.766	16.99520	7.876640	22282.73
#2	230653.5	5.740667	92.25805	1313.271	17.14564	8.293671	22380.88
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	569.4000	348.5346	639.7080	H624148.8	877.4075	51672.76	H16585.55
#1	568.5833	347.9594	639.2182	H622930.8	876.1998	51561.90	H16548.30
#2	570.2167	349.1097	640.1979	H625366.8	878.6150	51783.61	H16622.81
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	16877.86	306.5261	7165.269	14.29059	-2.39946	1156.947	17.82382
#1	16849.63	306.9834	7168.018	15.49082	-2.26127	1193.190	16.18992
#2	16906.09	306.0689	7162.519	13.09035	-2.53764	1120.705	19.45772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1551.183	2017.944	1.412907	8.221084	56.06193	H25444.52	895.2744
#1	1548.666	2013.295	1.705193	7.756387	53.69227	H25427.38	895.1346
#2	1553.700	2022.593	1.120621	8.685780	58.43161	H25461.66	895.4143
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	868.4739	-5.37332	24.12243	1516.897
#1	866.7324	-6.08159	26.27692	1514.717
#2	870.2154	-4.66506	21.96794	1519.078
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-007-013-1/2 Operator:
Run Time: 11/19/07 21:25:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	133494.0	3.249789	51.06559	1354.853	27.89304	6.433569	27130.44
#1	133517.7	2.764111	52.54065	1353.922	27.91058	6.526752	27140.66
#2	133470.3	3.735467	49.59053	1355.784	27.87549	6.340385	27120.23
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	354.1769	363.4262	373.4562	491479.0	336.9843	18352.56	H22162.22
#1	354.3462	364.0525	373.7029	491732.2	337.7192	18371.50	H22182.70
#2	354.0075	362.7999	373.2094	491225.8	336.2494	18333.60	H22141.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	22847.37	220.7163	10297.00	8.631884	L-5.85648	1057.687	24.58582
#1	22855.47	220.4500	10304.50	8.714295	L-5.76311	1099.933	26.68510
#2	22839.27	220.9827	10289.51	8.549473	L-5.94984	1015.440	22.48654
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	936.0378	1564.251	5.503463	11.01006	43.01162	14419.81	352.7877
#1	935.9863	1565.004	4.731463	10.92881	41.06138	14420.39	354.7981
#2	936.0894	1563.497	6.275463	11.09130	44.96186	14419.22	350.7772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	329.0826	-12.4860	19.19070	921.3757
#1	329.1797	-15.9041	21.02336	921.5241
#2	328.9855	-9.06788	17.35804	921.2274
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CVCCV4 Operator:
Run Time: 11/19/07 21:37:04
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51722.66	517.1536	514.6736	505.3236	51.10094	501.1337	99162.64
#1	51645.29	515.6477	512.1248	505.1773	50.94030	500.4613	98935.85
#2	51800.02	518.6594	517.2224	505.4699	51.26158	501.8062	99389.44
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	507.6799	512.5519	522.9343	50788.73	512.4579	99751.44	519.9892
#1	506.8854	510.4273	521.8503	50674.37	512.3242	99515.36	518.9429
#2	508.4743	514.6765	524.0184	50903.10	512.5917	99987.51	521.0355
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	507.1466	500.9100	24669.13	518.5110	532.3022	102226.7	505.5872
#1	507.3899	500.7818	24617.08	518.3572	530.7899	102055.3	507.6781
#2	506.9032	501.0383	24721.18	518.6647	533.8146	102398.1	503.4962
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	521.0047	522.4522	524.4313	513.8787	526.7833	518.0574	511.1849
#1	520.3691	521.5752	522.7828	511.4189	524.3600	517.7371	510.3018
#2	521.6403	523.3292	526.0798	516.3384	529.2067	518.3776	512.0679
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	513.0945	516.3478	519.5925	523.4211
#1	513.3354	513.4921	520.7897	522.6586
#2	512.8535	519.2034	518.3953	524.1836
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB4 Operator:
Run Time: 11/19/07 21:45:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	35.60045	.6413066	1.173361	.1808515	-.179574	.0652258	94.81520
#1	46.13534	-.711601	2.159417	.2445395	-.165295	.2753140	112.5338
#2	25.06556	1.994214	.1873061	.1171634	-.193853	-.144862	77.09656
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.4041080	.6912905	1.516300	23.63027	.0059673	40.06364	.5127455
#1	-.057746	.4981456	1.359448	21.87199	.2774356	56.61986	.6539087
#2	.8659619	.8844354	1.673152	25.38856	-.265501	23.50741	.3715823
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-4.29571	-.255537	25.60812	.1622142	.4008686	59.47258	-1.67551
#1	-4.68977	-.311525	20.40649	-2.84966	.3965499	-23.1300	-1.07160
#2	-3.90165	-.199550	30.80975	3.174089	.4051873	142.0752	-2.27942
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.237230	1.915861	.4412413	1.626321	1.123726	.5300605	1.694649
#1	-.182172	1.959338	.2548716	1.724711	1.177399	.5379435	1.184643
#2	-.292288	1.872384	.6276109	1.527930	1.070052	.5221776	2.204655
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.838466	1.929638	-.721591	.1813462
#1	-.176261	-1.43686	-3.55615	-.343246
#2	-1.50067	5.296139	2.112970	.7059385
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: S 711033-008-015-1/2 Operator:
Run Time: 11/19/07 21:53:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	226163.4	5.298819	60.47110	994.6014	23.91392	7.354979	45246.70
#1	226158.0	4.111850	61.98328	994.3653	23.96345	7.386822	45220.72
#2	226168.9	6.485788	58.95891	994.8376	23.86438	7.323135	45272.69
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	385.9571	220.9417	534.3216	482693.8	300.3599	39565.16	H12244.14
#1	386.2030	220.2870	535.0331	482773.5	298.2247	39576.95	H12252.53
#2	385.7112	221.5964	533.6101	482614.0	302.4951	39553.37	H12235.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	12308.76	219.8907	19194.95	9.759514	L-9.37446	1511.314	11.61757
#1	12308.27	219.2141	19226.50	9.953969	L-9.26523	1471.158	13.40432
#2	12309.26	220.5673	19163.40	9.565060	L-9.48370	1551.470	9.830811
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1126.435	H12963.32	40.45995	11.57426	37.50908	H21046.28	318.9711
#1	1126.869	H12973.08	41.38457	12.57083	39.48701	H21086.82	318.6449
#2	1126.001	H12953.55	39.53532	10.57769	35.53114	H21005.75	319.2973
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	291.0542	-6.75957	18.01895	1101.677
#1	288.0145	-4.48991	17.17580	1103.499
#2	294.0939	-9.02923	18.86210	1099.855
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-009-017-1/2 Operator:
Run Time: 11/19/07 22:02:09
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	128665.2	2.427844	39.16781	1061.873	11.85934	4.431095	22868.97
#1	127055.9	3.756930	39.34959	1048.537	11.66033	4.600723	22544.01
#2	130274.6	1.098758	38.98603	1075.210	12.05835	4.261467	23193.93
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	252.2829	133.7233	132.4644	150456.6	550.4085	14366.29	9275.593
#1	248.7083	131.5893	130.9843	148372.0	542.0639	14166.98	9145.103
#2	255.8575	135.8573	133.9445	152541.2	558.7530	14565.61	9406.083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	9252.383	110.1965	6477.626	8.285574	-2.93597	852.6280	6.421074
#1	9121.615	108.6466	6423.317	7.759723	L-3.07956	869.2325	3.068764
#2	9383.151	111.7464	6531.934	8.811424	-2.79237	836.0235	9.773384
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	631.6389	1024.259	16.64350	8.381940	35.63126	6760.352	558.3373
#1	622.3314	1010.369	16.12136	8.126483	33.29905	6674.664	550.8908
#2	640.9464	1038.150	17.16565	8.637397	37.96347	6846.040	565.7839
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	546.4440	-8.27721	16.56686	614.9058
#1	537.6504	-8.02580	15.65238	606.0905
#2	555.2375	-8.52862	17.48134	623.7210
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-010-019-1/2 Operator:
Run Time: 11/19/07 22:10:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	154045.6	6.280113	54.21894	880.7823	18.48844	3.801619	21514.27
#1	154022.8	8.034872	55.13105	880.7070	18.56680	3.834839	21527.09
#2	154068.5	4.525353	53.30683	880.8578	18.41007	3.768398	21501.45
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	252.6558	160.6758	254.7431	300601.7	436.2798	18000.24	H11393.46
#1	252.8633	161.5381	255.3378	301091.9	437.1786	18014.04	H11417.78
#2	252.4482	159.8135	254.1483	300111.4	435.3810	17986.44	H11369.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	11436.26	162.4076	8398.590	14.86039	L-4.65560	934.0019	10.13034
#1	11446.92	162.1786	8411.849	13.67660	L-4.50970	917.5255	12.58478
#2	11425.61	162.6367	8385.332	16.04417	L-4.80150	950.4784	7.675903
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	694.0559	1301.254	13.54346	10.57706	33.64954	10003.36	445.4230
#1	695.3170	1302.987	15.11210	10.79124	34.09913	10041.70	445.8627
#2	692.7949	1299.522	11.97483	10.36289	33.19996	9965.017	444.9834
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	431.7081	-3.17081	23.87588	680.1779
#1	432.8365	-4.66812	22.84886	682.3083
#2	430.5797	-1.67350	24.90291	678.0475
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-011-021-1/2 Operator:
Run Time: 11/19/07 22:18:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	133709.8	4.442040	40.24550	1101.501	11.86788	5.006709	27278.43
#1	133753.1	5.537162	38.91750	1097.739	12.04364	5.328371	27435.05
#2	133666.3	3.346918	41.57349	1105.263	11.69212	4.685047	27121.80
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	260.8367	138.5125	147.1987	148518.3	576.3192	15020.60	9606.839
#1	261.8389	140.2619	148.3642	149530.3	580.2289	15142.33	9696.865
#2	259.8344	136.7631	146.0332	147506.2	572.4096	14898.88	9516.812
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	9585.948	114.3340	6777.718	10.88837	L-3.25019	815.0472	8.501713
#1	9633.341	114.9183	6820.264	9.235974	L-3.41375	862.4835	5.918297
#2	9538.556	113.7497	6735.171	12.54078	L-3.08663	767.6108	11.08513
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	649.0498	1090.315	17.49029	9.050906	38.17767	7060.881	584.5469
#1	654.5336	1099.614	17.08896	8.903403	37.66983	7092.742	588.8403
#2	643.5659	1081.016	17.89161	9.198409	38.68552	7029.020	580.2534
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	572.2053	-4.27796	18.47144	632.4115
#1	575.9231	-7.56125	17.63448	637.9218
#2	568.4876	-.994678	19.30840	626.9013
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-012-023-1/2 Operator:
Run Time: 11/19/07 22:27:13
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	232932.8	5.937548	91.46429	1334.977	17.50455	6.813847	21458.30
#1	233421.8	8.229956	91.57934	1338.736	17.50437	6.365280	21443.00
#2	232443.8	3.645140	91.34924	1331.219	17.50473	7.262413	21473.59
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	520.2295	324.1122	625.7526	H602552.0	860.9523	50443.07	H16328.16
#1	520.2922	323.5916	625.9550	H602294.6	860.3238	50402.30	H16309.62
#2	520.1669	324.6329	625.5503	H602809.5	861.5807	50483.84	H16346.70
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	16627.27	305.0903	7681.944	13.05528	-2.55378	1108.436	18.67795
#1	16624.78	305.9567	7695.400	13.42824	-2.44483	1094.446	19.71574
#2	16629.76	304.2239	7668.488	12.68234	-2.66273	1122.426	17.64016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1496.558	2109.911	-1.28514	9.364349	98.73246	H24344.90	879.1719
#1	1495.533	2108.499	-1.40882	9.768002	96.58728	H24360.59	877.6339
#2	1497.583	2111.323	-1.16147	8.960697	100.8776	H24329.22	880.7098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	851.8425	-5.91387	22.53976	1461.895
#1	851.6688	-3.66896	21.97673	1459.879
#2	852.0162	-8.15877	23.10278	1463.910
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-013-025-1/2 Operator:
Run Time: 11/19/07 22:35:34
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	232590.3	7.280791	38.83908	1337.656	4.151062	7.801010	54048.12
#1	232575.0	7.460651	37.66127	1339.602	4.133081	7.582508	53907.52
#2	232605.7	7.100931	40.01689	1335.711	4.169042	8.019512	54188.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	948.4385	438.7972	756.8973	413570.0	774.5583	105453.6	H18882.70
#1	946.6869	437.3966	755.8981	412466.7	772.4944	105148.1	H18813.65
#2	950.1902	440.1978	757.8965	414673.4	776.6222	105759.1	H18951.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	19167.73	573.2574	5351.558	11.93010	-1.33662	995.1152	21.62975
#1	19122.84	572.4410	5352.143	12.59682	-1.61071	988.3533	17.73178
#2	19212.63	574.0739	5350.973	11.26337	-1.06253	1001.877	25.52773
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1188.806	1983.889	26.75558	6.713159	36.03252	18445.10	787.0787
#1	1185.338	1977.799	26.47761	6.127294	36.92504	18413.49	784.8927
#2	1192.274	1989.979	27.03356	7.299023	35.14001	18476.71	789.2648
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	768.2980	-5.02913	20.40960	1159.910
#1	766.2952	-4.90179	21.34601	1156.971
#2	770.3008	-5.15647	19.47319	1162.849
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-014-027-1/2 Operator:
Run Time: 11/19/07 22:43:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	279132.8	4.694552	32.95872	1065.296	3.428217	7.929933	47778.41
#1	279173.2	3.772798	33.89139	1065.638	3.457005	7.673863	47744.04
#2	279092.5	5.616306	32.02605	1064.953	3.399429	8.186005	47812.79
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1367.948	377.7889	810.8674	461132.8	328.1879	154077.8	H14699.77
#1	1366.652	377.4062	810.7954	460994.5	328.7513	154011.2	H14689.25
#2	1369.244	378.1716	810.9393	461271.1	327.6246	154144.4	H14710.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	14660.34	733.6342	3839.094	10.30803	-1.00936	934.5476	11.99536
#1	14657.74	732.6916	3847.669	8.907111	-.832940	909.5233	16.98341
#2	14662.93	734.5767	3830.519	11.70894	-1.18578	959.5720	7.007317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1389.207	1181.903	18.82065	6.141084	18.66190	H23694.40	343.9501
#1	1389.053	1181.064	18.50553	5.677231	22.19228	H23682.57	342.0738
#2	1389.361	1182.742	19.13577	6.604937	15.13151	H23706.24	345.8263
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	320.3068	-10.1930	20.55843	1354.293
#1	322.0899	-11.0452	18.88316	1354.696
#2	318.5237	-9.34080	22.23370	1353.889
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

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Method: TRACEV2 Sample Name: CRCRI Operator:
Run Time: 11/19/07 22:55:08
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	444.6644	123.9626	22.32082	419.0175	10.14215	10.56200	577.4749
#1	449.8553	123.2629	23.18510	418.4508	10.15489	10.57980	580.5037
#2	439.4735	124.6623	21.45653	419.5840	10.12941	10.54420	574.4462
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	500.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	20.40087	112.8126	53.02996	Q253.3935	6.887746	532.8962	32.80894
#1	19.99309	113.1536	52.94998	Q259.3462	Q7.751041	534.4382	33.06351
#2	20.80864	112.4716	53.10994	247.4408	6.024451	531.3542	32.55436
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	27.96611	83.45755	511.3840	9.474747	20.54823	1126.595	17.38116
#1	29.06330	84.02529	506.0223	10.05621	20.84575	1073.852	16.99883
#2	26.86894	82.88982	516.7457	8.893284	20.25071	1179.338	17.76350
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		80.00000	500.0000	10.00000	20.00000	1000.000	20.00000
Range		25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	110.0402	44.58112	15.21136	5.361592	28.58443	28.75149	7.251802
#1	109.9973	44.72666	14.63956	5.625608	26.81880	29.18998	8.644347
#2	110.0831	44.43559	15.78317	5.097577	30.35007	28.31299	5.859258
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	100.0000	40.00000	15.00000	5.000000	25.00000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	6.705626	9.664829	9.379614	106.6665
#1	7.304296	8.241740	10.96335	106.4585
#2	6.106955	11.08792	7.795876	106.8745
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IAICSA Operator:
Run Time: 11/19/07 23:03:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	494256.5	-.954070	-3.77908	1.200250	-.440973	2.451541	503967.4
#1	496995.8	.4697573	-5.85722	1.224206	-.426073	2.355097	507601.3
#2	491517.2	-2.37790	-1.70095	1.176294	-.455874	2.547985	500333.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1.661590	3.278466	3.897426	199627.5	-1.51353	500215.4	Q13.52618
#1	1.909271	3.521185	3.751156	200866.2	-.460055	502980.6	Q13.83467
#2	1.413908	3.035747	4.043695	198388.7	-2.56700	497450.2	Q13.21769
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	47.04359	3.195996	8.756042	1.534684	-.308135	-203.652	-11.7825
#1	48.68948	3.191006	10.30893	2.702978	-.176814	-164.280	-9.19178
#2	45.39770	3.200986	7.203153	.3663900	-.439456	-243.023	-14.3732
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.8202758	1.339075	1.414260	1.322559	-2.12672	12.92320	-2.97921
#1	1.172337	1.385466	1.867386	1.498506	-.675960	13.14181	-1.73117
#2	.4682150	1.292685	.9611349	1.146611	-3.57748	12.70459	-4.22725
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-.780788	1.397960	1.602945	5.823498
#1	.1753998	3.235885	2.436424	6.146980
#2	-1.73698	-.439965	.7694664	5.500015
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IBICSAB Operator:
Run Time: 11/19/07 23:11:53
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	490077.8	618.6888	105.1261	509.9820	495.9155	942.7932	493262.4
#1	489515.0	615.7750	101.4926	510.0990	492.0471	940.0888	491097.0
#2	490640.5	621.6027	108.7597	509.8650	499.7838	945.4976	495427.8
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	488.3120	489.8381	548.0888	196187.9	49.20503	491409.6	523.5413
#1	487.0485	485.9469	545.4262	195155.5	48.36739	488744.8	519.7171
#2	489.5756	493.7294	550.7513	197220.2	50.04268	494074.4	527.3654
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	531.4590	935.5859	5776.053	50.17139	220.1216	10576.85	88.85158
#1	531.9647	933.1808	5751.352	48.77945	218.9907	10616.57	88.67571
#2	530.9534	937.9911	5800.754	51.56332	221.2524	10537.13	89.02744
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	514.1644	1026.527	1073.337	1010.195	1059.582	1013.165	49.45651
#1	511.3956	1020.458	1068.759	1001.527	1049.164	1014.155	49.14522
#2	516.9332	1032.595	1077.914	1018.864	1070.000	1012.175	49.76781
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	49.07919	50.66754	49.92321	542.2976
#1	47.97837	50.81581	47.76118	539.7662
#2	50.18000	50.51928	52.08525	544.8290
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

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Method: TRACEV2 Sample Name: CVCCV4 Operator:
Run Time: 11/19/07 23:20:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51673.98	516.3070	513.1572	509.9984	50.68970	498.4530	97860.51
#1	51641.83	515.7114	515.2607	508.9721	50.77103	498.2904	97929.61
#2	51706.12	516.9027	511.0537	511.0246	50.60838	498.6156	97791.41
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	503.6583	505.1207	519.2632	50249.55	503.7378	98792.28	512.2740
#1	503.3177	506.6385	519.9404	50336.88	504.5095	98994.02	512.9627
#2	503.9988	503.6030	518.5860	50162.22	502.9662	98590.55	511.5855
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	507.2973	498.8853	24579.67	513.5048	526.0912	102434.6	503.2767
#1	508.0720	500.5303	24579.79	513.4142	526.3926	102339.5	505.6197
#2	506.5225	497.2403	24579.54	513.5954	525.7897	102529.8	500.9336
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	515.1974	515.4803	521.8578	512.6467	516.0975	513.1303	503.0111
#1	516.0861	515.8940	522.4442	511.6192	517.7526	512.8386	504.5657
#2	514.3086	515.0665	521.2715	513.6741	514.4424	513.4220	501.4564
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	504.1012	511.3700	514.5721	516.2768
#1	504.4813	512.7585	513.7419	518.4682
#2	503.7211	509.9814	515.4023	514.0854
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB4 Operator:
Run Time: 11/19/07 23:28:37
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	39.09776	-1.37548	.0017689	.0980127	.0090023	-.083633	32.76047
#1	45.35767	-.359900	.1408861	.1418029	.0200573	.0890906	40.63333
#2	32.83785	-2.39106	-.137348	.0542224	-.002053	-.256358	24.88761
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.106774	.1984235	-.208427	11.98033	.8066407	34.55231	.0465134
#1	.1905319	.4102390	-.131724	20.04167	.6621655	46.76852	.1193225
#2	-.404080	-.013392	-.285131	3.918980	.9511160	22.33611	-.026296
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-3.68288	-.912685	14.65976	1.726539	-.414144	36.09088	-.922604
#1	-.203070	-.396821	23.74039	1.629161	-.094629	112.8738	-3.30885
#2	-7.16269	-1.42855	5.579126	1.823917	-.733659	-40.6921	1.463638
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.236349	1.771688	-.330942	2.431885	-1.45766	.0974923	-.610114
#1	.1456494	1.723923	-.445132	3.305468	-.455776	.3029418	-.464622
#2	-.618348	1.819452	-.216752	1.558302	-2.45954	-.107957	-.755606
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	1.514924	-1.66350	3.421461	-.271379
#1	1.225465	-2.59501	3.741150	.2821118
#2	1.804383	-.731981	3.101771	-.824869
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: S 711033-015-029-1/2 Operator:
Run Time: 11/19/07 23:36:59
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	291843.1	3.184238	41.52054	848.3489	3.001844	.1295414	25743.31
#1	292227.2	6.088633	42.04968	847.8104	3.005898	.0528069	25722.21
#2	291458.9	.2798443	40.99139	848.8873	2.997788	.2062759	25764.40
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1495.834	410.1744	607.1346	488222.6	476.8693	150787.5	H20769.71
#1	1495.113	410.4563	608.4165	488182.0	476.6817	150811.6	H20778.96
#2	1496.555	409.8925	605.8527	488263.2	477.0568	150763.4	H20760.46
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	21749.41	731.5699	3063.766	7.112736	-1.56929	1054.948	32.12989
#1	21740.89	730.9432	3073.019	7.774456	-1.76922	1068.425	34.43970
#2	21757.94	732.1967	3054.512	6.451015	-1.36936	1041.472	29.82008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1401.400	1028.872	-.052595	7.947853	13.27290	H24759.19	495.7846
#1	1402.063	1030.074	-.202954	8.713329	14.13950	H24741.20	493.7449
#2	1400.736	1027.669	.0977640	7.182377	12.40629	H24777.18	497.8242
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	467.4116	-5.15450	13.24625	1365.909
#1	468.1500	-3.93659	13.62988	1367.424
#2	466.6732	-6.37241	12.86262	1364.394
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-016-031-1/2 Operator:
Run Time: 11/19/07 23:45:21
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	221000.8	5.702282	36.77819	579.9491	.9966694	-.567221	28398.15
#1	220816.8	6.758953	37.76286	580.4656	.9040525	-.747498	28331.44
#2	221184.9	4.645611	35.79353	579.4326	1.089286	-.386944	28464.85
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1134.998	226.2318	390.8641	301181.7	386.7769	103019.0	H10950.36
#1	1132.690	225.5545	390.8155	300570.9	385.6213	102775.8	H10919.58
#2	1137.306	226.9091	390.9127	301792.4	387.9324	103262.1	H10981.14
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	11103.00	499.4798	2500.545	8.952412	-.338758	977.9437	14.30850
#1	11081.19	499.5763	2501.155	12.56046	-.014766	1019.082	16.16042
#2	11124.80	499.3833	2499.935	5.344366	-.662750	936.8049	12.45657
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	900.4412	748.1555	-1.53767	6.512358	16.33838	H21983.19	404.1019
#1	898.6158	746.1320	-1.42641	6.160086	15.20068	H21959.72	404.0446
#2	902.2666	750.1791	-1.64894	6.864630	17.47609	H22006.65	404.1592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	378.1143	-6.62957	16.74330	875.7272
#1	376.4096	.0624306	18.80937	874.3366
#2	379.8190	-13.3216	14.67723	877.1177
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-017-033-1/2 Operator:
Run Time: 11/19/07 23:53:42
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	229537.8	5.416713	39.16342	618.0930	1.033778	-.063021	29900.22
#1	229837.9	7.009480	41.49056	617.9524	1.221021	-.052544	29984.32
#2	229237.8	3.823946	36.83629	618.2335	.8465358	-.073498	29816.11
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1203.334	228.5519	384.4134	321263.9	408.0709	108615.3	H11546.78
#1	1205.083	229.7531	385.1678	322332.9	410.9866	109079.0	H11595.08
#2	1201.585	227.3506	383.6590	320195.0	405.1551	108151.5	H11498.47
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	11721.57	529.7699	2615.307	5.977640	-.412555	983.1765	11.05464
#1	11745.73	530.4476	2628.833	7.315687	-.252663	1058.817	9.979828
#2	11697.41	529.0922	2601.781	4.639593	-.572447	907.5360	12.12946
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	959.0061	801.2282	-1.76538	6.165550	18.06954	H24488.14	424.7538
#1	962.0255	804.1440	-1.26940	7.192166	17.12912	H24509.75	428.2923
#2	955.9866	798.3123	-2.26137	5.138933	19.00996	H24466.53	421.2152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	399.7294	-12.4204	15.17654	931.4766
#1	402.3337	-9.39378	15.67031	934.6005
#2	397.1250	-15.4470	14.68277	928.3525
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-018-035-1/2 Operator:
Run Time: 11/20/07 00:02:04
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	261931.8	7.502824	57.29961	1145.727	-1.10890	L-4.91284	20684.31
#1	262510.1	6.712059	59.39181	1139.531	4.760564	L-3.53389	20934.67
#2	261353.6	8.293589	55.20741	1151.922	L-6.97835	L-6.29180	20433.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1029.916	329.1773	524.0339	401156.4	449.8546	77633.41	H21876.88
#1	1035.860	337.1262	530.1399	408249.3	459.6483	79144.25	H22347.86
#2	1023.972	321.2285	517.9278	394063.5	440.0610	76122.57	H21405.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	24054.25	488.3347	4308.622	-4.19740	-2.99908	893.0992	68.25551
#1	24341.44	492.8860	4337.797	3.366652	L-3.01722	987.2286	46.38019
#2	23767.07	483.7834	4279.447	-11.7614	-2.98094	798.9698	90.13082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1184.064	945.1541	5.600606	7.475576	14.22006	18070.41	459.0817
#1	1212.234	961.9868	9.328839	7.601600	15.33494	18278.75	480.0274
#2	1155.894	928.3215	1.872373	7.349553	13.10519	17862.06	438.1359
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	445.2411	-11.1532	-.719585	1161.743
#1	449.4587	-6.91530	8.507530	1183.414
#2	441.0234	-15.3911	-9.94670	1140.072
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-019-037-1/2 Operator:
Run Time: 11/20/07 00:10:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	255616.4	3.610815	49.23438	861.3583	L-3.73055	L-12.7541	17477.27
#1	255764.0	3.147465	49.47673	861.4415	L-4.86491	L-12.8390	17483.30
#2	255468.8	4.074165	48.99202	861.2750	L-2.59619	L-12.6692	17471.23
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1177.855	255.8122	484.4290	344903.4	323.3863	85188.15	H14061.66
#1	1178.467	256.0418	485.3304	345474.2	323.2199	85279.91	H14083.65
#2	1177.242	255.5826	483.5275	344332.7	323.5527	85096.39	H14039.66
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	16511.09	497.6661	3413.227	L-25.3841	L-3.23662	927.2072	47.44925
#1	16521.37	496.8944	3419.129	L-26.3347	L-3.25889	948.6606	49.32394
#2	16500.81	498.4377	3407.325	L-24.4335	L-3.21435	905.7539	45.57455
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1045.958	720.8914	L-27.8602	4.908165	4.728578	18897.18	346.9903
#1	1046.771	721.3763	L-27.3768	4.733150	2.970366	18922.44	347.1118
#2	1045.145	720.4065	L-28.3436	5.083179	6.486791	18871.92	346.8688
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	311.5842	-15.6753	-30.2386	1026.431
#1	311.2739	-16.4451	-31.2796	1028.803
#2	311.8945	-14.9055	-29.1976	1024.059
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-020-039-1/2 Operator:
Run Time: 11/20/07 00:18:47
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	65456.07	8.244528	30.12449	874.1276	5.157639	-1.41800	18863.83
#1	66402.78	6.862252	32.27034	866.6993	5.157458	-1.29167	20108.39
#2	64509.37	9.626802	27.97865	881.5560	5.157820	-1.54434	17619.27
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	78.61393	56.76794	124.6407	77158.78	556.4456	5131.118	3379.794
#1	81.95177	64.25513	133.3870	87642.84	594.3727	5704.020	3781.806
#2	75.27609	49.28075	115.8943	66674.71	518.5183	4558.217	2977.781
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	3884.350	52.72156	5088.939	8.709580	-1.77256	598.9410	4.421333
#1	4152.938	55.35641	5110.924	10.53064	-1.54806	637.3447	3.677269
#2	3615.761	50.08670	5066.954	6.888525	-1.99706	560.5373	5.165398
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	198.6180	546.2394	9.905273	7.658840	29.59780	3329.571	591.9620
#1	217.5168	590.6617	16.62741	8.115670	33.63419	3554.951	618.1931
#2	179.7191	501.8171	3.183136	7.202010	25.56142	3104.190	565.7309
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	538.6873	5.315372	10.40659	194.2551
#1	582.4625	2.853331	14.36919	212.4128
#2	494.9120	7.777413	6.443993	176.0974
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 711033-021-041-1/2 Operator:
Run Time: 11/20/07 00:27:09
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	102868.7	7.402201	39.87489	1841.914	18.17904	5.680941	59139.43
#1	103737.7	6.072352	42.84091	1829.971	18.80412	5.923661	61517.22
#2	101999.7	8.732050	36.90887	1853.857	17.55396	5.438221	56761.64
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	137.8114	53.68375	202.8412	111683.2	407.3192	19834.67	H18307.36
#1	141.4487	58.90038	211.7069	121308.2	419.5072	21213.13	H19659.22
#2	134.1740	48.46711	193.9755	102058.2	395.1313	18456.21	H16955.50
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	22903.53	249.7007	9389.500	-.133548	L-6.56051	952.1042	75.87348
#1	23878.72	254.9561	9395.799	1.454898	L-6.41596	1024.519	81.17946
#2	21928.35	244.4453	9383.202	-1.72199	L-6.70507	879.6898	70.56750
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	268.8972	1145.364	13.58208	6.584602	14.83567	8712.806	424.8097
#1	286.9459	1203.559	16.29607	7.161474	17.66434	8900.982	443.0394
#2	250.8486	1087.169	10.86809	6.007729	12.00700	8524.629	406.5800
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	398.5739	-.961933	.2805576	262.8360
#1	407.7410	.3907456	1.986887	278.2208
#2	389.4069	-2.31461	-1.42577	247.4513
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-004-004-1/1 Operator:
Run Time: 11/20/07 00:35:30
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	45840.96	2.172032	16.04204	306.6181	L-2.63962	L-7.96112	2066.319
#1	45229.98	1.712563	15.94167	304.2391	L-2.55870	L-7.88199	2017.196
#2	46451.95	2.631500	16.14242	308.9971	L-2.72053	L-8.04024	2115.443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	385.4640	60.20312	206.2559	159471.1	231.9540	1310.058	7280.680
#1	379.2068	58.46844	201.6769	153921.7	224.2672	1271.872	7052.166
#2	391.7213	61.93781	210.8349	165020.5	239.6408	1348.244	7509.193
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	8510.249	151.5741	1351.925	-19.5325	-1.61647	323.0933	28.30175
#1	8322.081	148.9190	1343.690	L-21.0965	-1.66066	401.3411	28.99120
#2	8698.417	154.2292	1360.160	-17.9685	-1.57227	244.8456	27.61230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	376.8965	142.4753	L-32.4057	2.799424	-2.84295	8417.345	246.0479
#1	366.4716	138.7972	L-37.0450	2.732817	-1.19705	8159.973	241.2242
#2	387.3215	146.1534	L-27.7664	2.866030	-4.48884	8674.717	250.8717
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	224.9069	-9.10972	-24.7440	368.3567
#1	215.7886	-10.9047	-26.1926	357.8469
#2	234.0253	-7.31475	-23.2955	378.8665
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-005-005-1/1 Operator:
Run Time: 11/20/07 00:43:52
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	35841.18	3.042299	6.100507	63.26522	L-6.01452	L-8.28426	1972.461
#1	35942.29	3.514676	6.480656	63.09170	L-4.64679	L-8.32613	1994.822
#2	35740.07	2.569922	5.720358	63.43874	L-7.38225	L-8.24240	1950.100
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	469.9254	3.556023	74.17220	153099.4	45.61898	1173.473	629.3818
#1	472.3167	4.043186	74.96791	156595.2	45.53611	1191.683	640.6391
#2	467.5342	3.068859	73.37647	149603.5	45.70185	1155.263	618.1245
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	729.2483	91.52898	819.9164	L-22.5559	-1.23030	249.1725	-5.09542
#1	741.5416	92.41245	820.3227	L-21.2106	-1.24866	225.0462	-3.82555
#2	716.9551	90.64552	819.5100	L-23.9013	-1.21193	273.2988	-6.36530
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	426.6141	113.7789	L-34.7673	3.134762	-2.76952	11042.88	57.84337
#1	433.1431	115.1030	L-34.6935	3.131008	-2.71670	11070.33	58.70054
#2	420.0851	112.4547	L-34.8412	3.138516	-2.82234	11015.43	56.98620
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	39.50671	-10.2504	-28.7088	422.3764
#1	38.95381	-10.4732	-26.5794	428.2975
#2	40.05959	-10.0275	-30.8383	416.4553
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: S 710183-006-006-1/1 Operator:
Run Time: 11/20/07 00:52:14
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	37308.08	1.549558	8.983689	38.83150	L-4.80187	L-9.95696	856.0315
#1	39109.50	.3701944	10.82787	40.92149	L-4.96823	L-10.2236	889.7436
#2	35506.67	2.728921	7.139511	36.74152	L-4.63550	L-9.69030	822.3194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	438.8034	1.264880	76.59063	178559.4	29.23487	866.5941	431.2432
#1	456.4494	.9984093	80.27814	181051.5	30.64691	892.2421	441.4168
#2	421.1575	1.531351	72.90311	176067.3	27.82283	840.9462	421.0695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	491.1877	83.50803	684.2936	L-29.4647	-1.42614	213.1705	-4.83496
#1	509.4350	87.59507	722.2736	L-32.4063	-1.30491	201.0573	-1.71472
#2	472.9404	79.42099	646.3137	L-26.5230	-1.54738	225.2837	-7.95520
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	421.1267	102.2658	L-59.4824	2.161306	-2.35257	10130.17	42.44231
#1	431.8174	105.7764	L-68.0048	1.853043	-3.37145	10485.69	42.13791
#2	410.4361	98.75519	L-50.9600	2.469570	-1.33369	9774.653	42.74671
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	22.63107	-12.8916	-37.7513	412.9149
#1	24.90133	-16.1419	-40.5385	422.5022
#2	20.36081	-9.64126	-34.9640	403.3276
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report QC Standard 11/20/07 01:11:42 AM

Operator:

Method: TRACEV2 Sample Name: CVCCV4
Run Time: 11/20/07 01:03:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51555.49	514.4934	478.4809	526.2372	46.61867	478.2541	92297.60
#1	51499.34	512.0745	478.9131	526.0993	46.48777	477.8919	92052.63
#2	51611.64	516.9123	478.0487	526.3752	46.74956	478.6164	92542.57
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	487.9304	452.1937	488.5956	46346.19	464.2248	Q89917.06	460.8493
#1	487.2687	450.2766	487.5903	46212.46	460.9927	Q89614.69	459.1284
#2	488.5922	454.1107	489.6010	46479.91	467.4569	90219.44	462.5702
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	484.4901	480.7903	23997.68	474.0800	484.4390	103209.1	495.9405
#1	486.1726	479.6582	23971.97	474.2101	482.9798	103157.9	497.4048
#2	482.8076	481.9224	24023.38	473.9499	485.8982	103260.3	494.4763
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	470.5016	472.8781	497.6062	483.6505	Q445.1161	492.7182	470.1115
#1	468.7746	471.5658	497.7915	480.2765	Q441.5925	489.9148	464.9620
#2	472.2285	474.1904	497.4209	487.0245	Q448.6397	495.5215	475.2611
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	461.2813	478.5623	471.8388	455.9700
#1	459.0079	475.1572	473.7365	455.4709
#2	463.5548	481.9675	469.9411	456.4692
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 11/20/07 01:20:04 AM page 1

Method: TRACEV2 Sample Name: BCCCB4 Operator:
Run Time: 11/20/07 01:11:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	2.304670	-.778551	1.230434	.1240128	.6306472	-.074024	-67.5325
#1	10.20258	.3825161	1.063605	.1231184	.5362629	-.099820	-52.3584
#2	-5.59324	-1.93962	1.397262	.1249072	.7250314	-.048228	-82.7067
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.208508	.3153896	-2.59333	20.45789	.0275252	22.28147	.1109907
#1	-.084000	.6522567	-2.32668	23.04188	.1021770	28.89687	.1579258
#2	-.333015	-.021478	-2.85998	17.87390	-.047127	15.66608	.0640556
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	6.912563	.0265838	13.61352	.2999106	.1146779	48.91108	-1.95235
#1	7.046467	.0688178	15.15517	.6446221	.6303433	58.38242	-1.79839
#2	6.778659	-.015650	12.07187	-.044801	-.400987	39.43974	-2.10632
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.106061	1.591164	-.142586	1.834550	-1.74852	.4962612	-.901835
#1	.0801031	1.704019	.2188796	2.266847	-1.66469	.6419612	.5766562
#2	-.292226	1.478309	-.504051	1.402254	-1.83235	.3505613	-2.38033
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	.4921138	2.004169	-.552308	.1270047
#1	-.135153	3.357014	-.711663	.2571611
#2	1.119380	.6513233	-.392953	-.003152
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Sample Name: STD0 Acquired: 12/3/2007 12:39:09 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00004	.00005	.00000	.00107	.00087	.00006	.00283
Stddev	.00001	.00000	.0000	.00001	.00001	.00000	.00052
%RSD	40.000	2.9758	1061.8	.97623	.71349	6.7414	18.347
#1	-.00003	.00005	-.00002	.00107	.00086	.00006	.00246
#2	-.00005	.00005	.00001	.00108	.00087	.00007	.00320

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00002	-.00008	.00001	.0001	.00016	-.00221	.0022
Stddev	.00003	.00000	.00000	.0000	.00001	.00034	.0001
%RSD	106.17	.63032	5.4232	15.77	7.0675	15.317	5.270
#1	-.00004	-.00008	.00001	.0001	.00017	-.00245	.0023
#2	-.00001	-.00008	.00001	.0001	.00015	-.00197	.0021

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00002	.00001	-.00774	.00002	-.00017	.00005	.00004
Stddev	.00000	.00000	.00068	.00001	.00000	.00001	.00003
%RSD	16.224	9.7459	8.7221	26.190	1.8258	28.258	82.473
#1	.00002	.00001	-.00822	.00003	-.00017	.00006	.00002
#2	.00002	.00001	-.00727	.00002	-.00018	.00004	.00006

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00008	.00002	.00105	.00006	-.00002	-.00001	.00004
Stddev	.00001	.00001	.00002	.00002	.00001	.00002	.00001
%RSD	6.2239	54.756	1.5624	32.223	29.061	161.05	17.943
#1	.00008	.00003	.00104	.00008	-.00002	-.00002	.00004
#2	.00008	.00001	.00106	.00005	-.00002	.00000	.00003

Sample Name: STD0 Acquired: 12/3/2007 12:39:09 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	Cts/S
Avg	.00064
Stddev	.00001
%RSD	1.8740
#1	.00065
#2	.00063

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42807.	14884.	549270.
Stddev	358.	62.	3613.
%RSD	.83564	.41872	.65772
#1	43060.	14840.	551820.
#2	42554.	14928.	546710.

Sample Name: STD1 Acquired: 12/3/2007 12:42:21 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Cd	Co
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00856	.34318	.00266	.01567	.19806	.02543	.09700	.04214
Stddev	.00003	.00486	.00001	.00002	.00016	.00007	.00011	.00006
%RSD	.32928	1.4160	.29045	.10666	.07968	.26201	.11533	.13507
#1	.00854	.34661	.00267	.01566	.19795	.02539	.09708	.04218
#2	.00858	.33974	.00265	.01568	.19817	.02548	.09692	.04210

Elem	Cr	Fe	Mn	Mo	Ni	Pb	Sb	Se
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00654	.36963	.03885	.02131	.02499	.00772	.00432	.00254
Stddev	.00002	.00370	.00010	.00002	.00002	.00005	.00006	.00002
%RSD	.35898	1.0022	.25042	.11121	.08962	.60951	1.3792	.83086
#1	.00652	.37225	.03878	.02133	.02497	.00775	.00428	.00256
#2	.00655	.36701	.03892	.02129	.02500	.00768	.00437	.00253

Elem	Si	Sn	Sr	Te	Ti	Tl	V	Zn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00225	.00768	.43087	.00304	.02381	.00302	.00849	.07665
Stddev	.00000	.00000	.00115	.00003	.00010	.00002	.00001	.00001
%RSD	.02755	.03946	.26736	1.1352	.41732	.75115	.06801	.00729
#1	.00225	.00768	.43006	.00302	.02374	.00300	.00849	.07666
#2	.00225	.00768	.43169	.00307	.02388	.00303	.00849	.07665

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43224.	14950.	553140.
Stddev	70.	61.	2280.
%RSD	.16305	.40919	.41221
#1	43274.	14907.	554750.
#2	43175.	14994.	551530.

Sample Name: STD2 Acquired: 12/3/2007 12:45:29 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Cd	Co
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02141	.86370	.00658	.03744	.48580	.06382	.23978	.10472
Stddev	.00033	.01189	.00001	.00001	.00492	.00097	.00002	.00004
%RSD	1.5593	1.3767	.12422	.01553	1.0126	1.5163	.00632	.03415
#1	.02165	.87211	.00657	.03743	.48928	.06450	.23977	.10475
#2	.02118	.85529	.00659	.03744	.48233	.06313	.23979	.10470

Elem	Cr	Cu2199	Fe	Mn	Mo	Ni	Pb	Sb
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01632	.0155	.91055	.09699	.05313	.06219	.01937	.01075
Stddev	.00027	.0001	.01352	.00153	.00001	.00001	.00009	.00000
%RSD	1.6348	.3603	1.4844	1.5815	.01879	.01728	.47738	.03958
#1	.01651	.0155	.92011	.09808	.05313	.06218	.01931	.01074
#2	.01613	.0154	.90099	.09591	.05312	.06219	.01944	.01075

Elem	Se	Si	Sn	Sr	Te	Ti	Tl	V
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00627	.00547	.01893	1.0596	.00742	.06010	.00746	.02105
Stddev	.00005	.00009	.00001	.0118	.00000	.00096	.00002	.00031
%RSD	.79142	1.6491	.06135	1.1092	.00165	1.5997	.22009	1.4819
#1	.00631	.00553	.01892	1.0679	.00742	.06078	.00747	.02127
#2	.00624	.00540	.01894	1.0513	.00742	.05942	.00745	.02083

Elem	Zn
Units	Cts/S
Avg	.18955
Stddev	.00032
%RSD	.16953
#1	.18933
#2	.18978

Sample Name: STD2 Acquired: 12/3/2007 12:45:29 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43312.	14939.	554530.
Stddev	38.	157.	8501.
%RSD	.08676	1.0517	1.5331
#1	43338.	14828.	548520.
#2	43285.	15050.	560540.

Sample Name: STD3 Acquired: 12/3/2007 12:48:52 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Cd	Co
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.04241	1.6839	.01291	.07217	.95881	.12642	.47210	.20647
Stddev	.00026	.0192	.00006	.00014	.00320	.00066	.00051	.00008
%RSD	.60977	1.1382	.47078	.19471	.33418	.51880	.10726	.04069
#1	.04260	1.6703	.01287	.07227	.96108	.12688	.47245	.20653
#2	.04223	1.6974	.01296	.07207	.95655	.12595	.47174	.20641

Elem	Cr	Cu2199	Fe	Mn	Mo	Ni	Pb	Sb
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.03237	.0303	1.7704	.19310	.10467	.12261	.03814	.02119
Stddev	.00015	.0001	.0193	.00106	.00002	.00018	.00007	.00004
%RSD	.47098	.2975	1.0915	.54891	.02385	.14883	.17363	.20466
#1	.03248	.0304	1.7567	.19385	.10468	.12274	.03809	.02122
#2	.03226	.0303	1.7841	.19235	.10465	.12248	.03819	.02116

Elem	Se	Si	Sn	Sr	Te	Ti	Tl	V
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01228	.01070	.03723	2.0717	.01447	.11948	.01465	.04161
Stddev	.00007	.00001	.00008	.0048	.00004	.00049	.00005	.00022
%RSD	.55489	.12288	.20604	.23294	.29026	.40695	.32930	.53886
#1	.01223	.01071	.03729	2.0751	.01444	.11983	.01468	.04176
#2	.01233	.01069	.03718	2.0683	.01450	.11914	.01462	.04145

Elem	Zn
Units	Cts/S
Avg	.37489
Stddev	.00006
%RSD	.01690
#1	.37494
#2	.37485

Sample Name: STD3 Acquired: 12/3/2007 12:48:52 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43489.	15183.	557000.
Stddev	17.	41.	1077.
%RSD	.03862	.27140	.19330
#1	43477.	15212.	556240.
#2	43500.	15154.	557770.

Sample Name: STD4 Acquired: 12/3/2007 12:52:16 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ca	K	Mg2802	Na
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.5428	.09488	21.70	2.1974
Stddev	.0132	.00130	.23	.0203
%RSD	.85720	1.3671	1.071	.92567
#1	1.5334	.09396	21.54	2.1830
#2	1.5521	.09580	21.87	2.2118

Int. Std.	Y_3774
Units	Cts/S
Avg	14903.
Stddev	204.
%RSD	1.3713
#1	15047.
#2	14758.

Sample Name: STD5 Acquired: 12/3/2007 12:55:31 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ca	K	Mg2802	Na
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.8000	.19403	49.95	5.4065
Stddev	.0881	.00595	.62	.1192
%RSD	2.3181	3.0662	1.240	2.2054
#1	3.7377	.18982	49.51	5.3222
#2	3.8623	.19824	50.38	5.4908

Int. Std.	Y_3774
Units	Cts/S
Avg	15101.
Stddev	352.
%RSD	2.3282
#1	15349.
#2	14852.

Sample Name: STD6 Acquired: 12/3/2007 12:58:52 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ca	K	Mg2802	Na
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.6896	.50627	94.08	10.760
Stddev	.0059	.00233	.62	.023
%RSD	.07605	.45951	.6543	.21023
#1	7.6855	.50463	94.51	10.776
#2	7.6938	.50792	93.64	10.744

Int. Std.	Y_3774
Units	Cts/S
Avg	14547.
Stddev	29.
%RSD	.19826
#1	14526.
#2	14567.

Sample Name: ICV Acquired: 12/3/2007 13:02:12 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	411.97	5078.1	436.57	426.37	425.46	42.229	5178.1
Stddev	4.73	27.9	5.03	.58	4.73	.382	60.2
%RSD	1.1472	.54920	1.1518	.13668	1.1118	.90441	1.1625
#1	415.31	5097.8	440.12	426.78	428.81	42.499	5220.7
#2	408.63	5058.4	433.01	425.95	422.12	41.959	5135.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41.826	434.70	417.26	406.8	5124.7	5180.9	F 5350.
Stddev	.107	1.11	4.29	.3	97.0	10.7	58.
%RSD	.25519	.25533	1.0280	.0721	1.8935	.20677	1.080
#1	41.901	435.48	420.29	407.0	5193.3	5188.5	5390.
#2	41.750	433.91	414.22	406.6	5056.1	5173.3	5309.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							400.0
Range							10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	418.27	407.21	10591.	422.80	422.36	409.50	422.39
Stddev	5.26	.70	105.	.16	1.42	1.04	.83
%RSD	1.2567	.17202	.99284	.03830	.33617	.25331	.19560
#1	421.99	407.70	10666.	422.68	423.37	408.76	422.98
#2	414.55	406.71	10517.	422.91	421.36	410.23	421.81
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICV Acquired: 12/3/2007 13:02:12 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 105.99	414.33	417.48	F 11.437	419.98	407.65	420.69
Stddev	.89	.94	2.14	.258	4.76	.92	4.04
%RSD	.84215	.22707	.51266	2.2526	1.1334	.22520	.95934
#1	106.62	415.00	418.99	11.255	423.34	407.00	423.54
#2	105.36	413.67	415.97	11.619	416.61	408.30	417.84
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	400.00			400.00			
Range	-10.000%			-10.000%			

Elem	Zn
Units	ppb
Avg	429.48
Stddev	1.38
%RSD	.32233
#1	430.46
#2	428.51
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43149.	14779.	546440.
Stddev	113.	140.	5257.
%RSD	.26229	.94909	.96205
#1	43069.	14680.	542720.
#2	43229.	14878.	550160.

Sample Name: ICB Acquired: 12/3/2007 13:05:30 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23728	-6.5861	.11255	-1.3556	.01950	.00100	12.781	-.01327
Stddev	.10501	14.810	.61890	.3567	.00027	.00034	3.994	.04107
%RSD	44.255	224.87	549.87	26.315	1.3721	33.686	31.249	309.60
#1	.31153	3.8862	-.32508	-1.1034	.01969	.00076	15.605	.01578
#2	.16303	-17.058	.55019	-1.6078	.01931	.00124	9.9571	-.04231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11885	-.24626	-1.640	-1.6917	-16.199	F 13.00	.02521	.21274
Stddev	.12513	.16714	1.064	1.7418	31.048	.42	.05793	.13883
%RSD	105.28	67.872	64.91	102.96	191.67	3.256	229.77	65.258
#1	.20734	-.36444	-2.393	-2.9234	5.7553	13.30	-.01575	.11457
#2	.03037	-.12807	-.8871	-.46007	-38.153	12.70	.06617	.31091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	116.53	-.19364	-1.2694	-.04593	-.96550	.29099	-.36051	.05048
Stddev	13.92	.09133	1.5789	2.7655	.77791	.40156	1.0931	.01939
%RSD	11.943	47.165	124.38	6021.3	80.570	138.00	303.21	38.417
#1	106.69	-.12906	-.15296	1.9096	-1.5156	.57493	-1.1334	.03677
#2	126.37	-.25823	-2.3859	-2.0015	-.41544	.00704	.41242	.06419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB Acquired: 12/3/2007 13:05:30 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.31441	.07521	-.90163	-.21441	-.15768
Stddev	.66881	.01378	1.7044	.09244	.04237
%RSD	212.72	18.323	189.03	43.112	26.871
#1	-.78733	.08496	-2.1068	-.27978	-.12772
#2	.15851	.06547	.30355	-.14905	-.18765
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43106.	15316.	553540.
Stddev	43.	664.	985.
%RSD	.10004	4.3320	.17802
#1	43075.	15786.	552840.
#2	43136.	14847.	554230.

Sample Name: CCV Acquired: 12/3/2007 13:08:45 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	517.18	51538.	505.06	506.52	495.43	50.308
Stddev	3.08	334.	1.50	1.93	2.05	.313
%RSD	.59598	.64838	.29760	.38162	.41393	.62143
#1	515.00	51774.	506.13	507.89	493.98	50.087
#2	519.36	51301.	504.00	505.15	496.88	50.529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	101760.	492.48	493.17	507.29	502.7	49874.
Stddev	472.	1.21	1.54	3.89	.3	299.
%RSD	.46391	.24542	.31205	.76672	.0510	.59962
#1	102100.	493.33	494.26	504.54	502.5	50085.
#2	101430.	491.62	492.08	510.04	502.9	49663.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25313.	F 104000.	498.92	501.63	102400.	494.27
Stddev	244.	664.	2.50	1.80	557.	.88
%RSD	.96534	.6387	.50196	.35803	.54393	.17886
#1	25486.	104400.	497.15	502.90	102790.	494.89
#2	25141.	103500.	500.69	500.36	102000.	493.64
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 13:08:45 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	490.49	510.45	501.80	525.73	494.78	498.83
Stddev	2.42	.54	3.18	2.59	.96	.79
%RSD	.49377	.10549	.63370	.49268	.19485	.15745
#1	492.21	510.84	504.05	523.90	495.46	498.28
#2	488.78	510.07	499.55	527.56	494.10	499.39
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	498.80	516.89	490.93	506.90	508.71
Stddev	3.60	3.47	1.58	2.88	1.89
%RSD	.72093	.67104	.32177	.56893	.37147
#1	501.34	514.44	492.04	504.86	510.04
#2	496.26	519.34	489.81	508.94	507.37
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42095.	14560.	536550.
Stddev	48.	84.	3633.
%RSD	.11430	.57498	.67706
#1	42061.	14501.	539120.
#2	42129.	14619.	533990.

Sample Name: CCB Acquired: 12/3/2007 13:12:14 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00147	8.5227	-.71273	-2.5820	-.03728	.00278	9.6213	-.01305
Stddev	.41490	10.732	.51824	.4087	.00317	.00072	.5146	.12455
%RSD	28285.	125.92	72.712	15.830	8.5024	25.965	5.3483	954.26
#1	-.29191	16.111	-.34628	-2.2929	-.03953	.00227	9.9852	.07502
#2	.29484	.93400	-1.0792	-2.8710	-.03504	.00329	9.2575	-.10113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23465	-.39570	-.5298	.94284	-21.058	.0400	-.04081	.29335
Stddev	.09044	.07786	.8869	6.5884	101.56	.0993	.01474	.35190
%RSD	38.541	19.676	167.4	698.78	482.30	248.4	36.118	119.96
#1	.29860	-.34064	.0973	5.6015	-92.873	.1102	-.03039	.04451
#2	.17070	-.45075	-1.157	-3.7158	50.758	-.0302	-.05123	.54218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	97.712	-.27816	.12474	.31922	-2.3195	-.38513	-.15947	-.00479
Stddev	4.529	.10664	.84933	.56249	2.8911	.39088	.85887	.00370
%RSD	4.6353	38.336	680.89	176.21	124.64	101.49	538.59	77.350
#1	94.509	-.20276	-.47583	.71696	-.27517	-.66152	-.76678	-.00217
#2	100.91	-.35357	.72530	-.07852	-4.3638	-.10873	.44785	-.00741
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 13:12:14 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.3195	.09216	-.90003	-.10049	-.16443
Stddev	.1390	.00050	.27096	.28620	.10468
%RSD	5.9936	.54623	30.105	284.81	63.664
#1	-2.2212	.09251	-.70844	.10188	-.09041
#2	-2.4179	.09180	-1.0916	-.30286	-.23846
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43041.	15137.	545840.
Stddev	100.	435.	3330.
%RSD	.23209	2.8722	.61007
#1	42971.	15444.	543480.
#2	43112.	14829.	548190.

Sample Name: PQL Acquired: 12/3/2007 13:15:32 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.9317	206.22	19.513	12.851	5.0411	1.9867	1019.3	6.1890
Stddev	.0847	35.13	.151	.334	.0065	.0172	3.8	.1243
%RSD	1.7183	17.035	.77374	2.5993	.12856	.86349	.37499	2.0076
#1	4.8717	181.38	19.406	12.615	5.0457	1.9989	1022.0	6.2768
#2	4.9916	231.06	19.620	13.088	5.0365	1.9746	1016.6	6.1011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.1221	4.9611	F 8.977	146.27	232.04	F 276.8	5.0492	5.5035
Stddev	.1040	.0090	.054	3.77	43.57	7.0	.0778	.2872
%RSD	2.0296	.18218	.6060	2.5755	18.777	2.520	1.5399	5.2176
#1	5.1956	4.9675	9.016	143.60	201.23	271.9	5.1041	5.3005
#2	5.0486	4.9547	8.939	148.93	262.84	281.7	4.9942	5.7065
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value			5.000			5.000		
Range			20.00%			20.00%		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2715.0	10.097	10.180	19.992	18.963	55.115	25.093	5.0169
Stddev	43.6	.367	1.221	.318	1.627	.321	.113	.0181
%RSD	1.6077	3.6328	11.996	1.5928	8.5778	.58169	.44876	.36139
#1	2745.8	9.8377	9.3165	19.767	20.114	54.888	25.172	5.0297
#2	2684.1	10.356	11.044	20.217	17.813	55.342	25.013	5.0041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: PQL Acquired: 12/3/2007 13:15:32 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.0602	25.322	29.789	9.9263	21.107
Stddev	.8566	.270	1.134	.1674	.047
%RSD	41.581	1.0670	3.8062	1.6868	.22183
#1	-2.6659	25.131	30.590	10.045	21.074
#2	-1.4544	25.513	28.987	9.8079	21.140
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43025.	14667.	549400.
Stddev	101.	67.	2510.
%RSD	.23382	.45417	.45688
#1	42954.	14620.	551180.
#2	43097.	14714.	547630.

Sample Name: ICSA Acquired: 12/3/2007 13:18:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F -4.0166	512070.	F -26.391	11.726	-1.3203	-.03283
Stddev	.1148	14504.	2.529	.664	.0666	.01074
%RSD	2.8583	2.8323	9.5847	5.6600	5.0467	32.724
#1	-4.0978	501820.	-24.602	12.196	-1.2732	-.04043
#2	-3.9355	522330.	-28.179	11.257	-1.3674	-.02524
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	3.0000		20.000			
Low Limit	-3.0000		-20.000			

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	480520.	-2.4347	3.2640	3.9057	F -15.12	186550.
Stddev	12924.	.6136	.2038	.1951	5.02	4854.
%RSD	2.6896	25.201	6.2445	4.9947	33.19	2.6020
#1	471380.	-2.0009	3.4081	3.7677	-18.67	183120.
#2	489660.	-2.8686	3.1199	4.0436	-11.57	189980.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit					3.000	
Low Limit					-3.000	

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-61.204	F 491800.	3.9223	.75397	161.17	2.8138
Stddev	20.084	19170.	.5553	.62844	2.64	.0491
%RSD	32.814	3.897	14.158	83.351	1.6352	1.7447
#1	-75.405	478300.	4.3150	1.1983	163.03	2.8485
#2	-47.003	505400.	3.5296	.30960	159.30	2.7791
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		3.000				
Low Limit		-3.000				

Sample Name: ICSA Acquired: 12/3/2007 13:18:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.4497	-2.6759	-16.183	-9.7864	.45437	F 6.5464
Stddev	7.4748	2.4373	5.743	1.2035	.00773	.0442
%RSD	305.13	91.083	35.490	12.297	1.7002	.67520
#1	7.7352	-.95247	-12.122	-10.637	.44890	6.5776
#2	-2.8358	-4.3993	-20.244	-8.9354	.45983	6.5151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						5.0000
Low Limit						-5.0000

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-21.018	14.977	.03018	.15234	-13.658
Stddev	1.295	.024	.31220	.08101	1.015
%RSD	6.1623	.16258	1034.5	53.175	7.4313
#1	-21.934	14.994	.25094	.09506	-12.940
#2	-20.103	14.960	-.19058	.20962	-14.376
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	40277.	14760.	512410.
Stddev	89.	267.	3603.
%RSD	.21982	1.8084	.70314
#1	40214.	14949.	509860.
#2	40339.	14571.	514960.

Sample Name: ICSAB Acquired: 12/3/2007 13:22:00 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	208.17	512530.	84.330	998.03	496.00	479.89
Stddev	.26	4232.	1.669	.50	.61	1.62
%RSD	.12378	.82569	1.9790	.05056	.12298	.33657
#1	208.35	509540.	83.150	998.39	496.43	481.03
#2	207.99	515520.	85.510	997.68	495.57	478.75
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	482190.	929.24	463.59	488.41	F 448.5	187730.
Stddev	4578.	1.20	.16	.15	1.2	1657.
%RSD	.94933	.12881	.03462	.03030	.2761	.88283
#1	478950.	930.08	463.70	488.52	447.6	186560.
#2	485430.	928.39	463.48	488.31	449.3	188900.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value					200.0	
Range					20.00%	

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5202.0	F 512000.	487.98	976.83	10954.	927.93
Stddev	41.3	15120.	.81	.70	110.	.84
%RSD	.79460	2.952	.16509	.07172	1.0085	.09098
#1	5172.7	501300.	488.55	977.32	10876.	928.52
#2	5231.2	522700.	487.41	976.33	11032.	927.33
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		200.0				
Range		20.00%				

Sample Name: ICSAB Acquired: 12/3/2007 13:22:00 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	46.748	604.84	F 32.229	F 1230.8	951.44	503.22
Stddev	1.525	2.93	.857	.1	2.12	1.46
%RSD	3.2631	.48444	2.6595	.01215	.22299	.28984
#1	47.826	602.77	31.623	1230.9	949.94	502.19
#2	45.669	606.91	32.835	1230.7	952.94	504.25
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value			50.000	1000.0		
Range			-20.000%	20.000%		

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	177.02	1003.5	89.391	490.96	993.30
Stddev	.92	.2	1.782	.66	2.96
%RSD	.51884	.02107	1.9932	.13490	.29850
#1	176.37	1003.6	90.651	491.43	995.39
#2	177.67	1003.3	88.131	490.50	991.20
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	40285.	14482.	515720.
Stddev	15.	181.	368.
%RSD	.03679	1.2497	.07140
#1	40296.	14610.	515460.
#2	40275.	14354.	515980.

Sample Name: LR Acquired: 12/3/2007 13:25:35 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1052.4	-410.75	2112.0	5071.4	^F *****	499.90	36.206
Stddev	.9	43.82	6.8	15.3	-----	1.05	10.257
%RSD	.08566	10.668	.31987	.30171	-----	.21038	28.330
#1	1051.8	-379.76	2116.8	5082.2	^ -----	500.65	28.953
#2	1053.0	-441.73	2107.2	5060.6	^ -----	499.16	43.459
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None
Value					10000.		
Range					-10.000%		

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2027.8	10077.	10385.	F 10300.	488920.	201.06	F 46.85
Stddev	4.3	26.	21.	29.	5144.	19.89	3.47
%RSD	.21204	.25732	.20350	.2861	1.0521	9.8903	7.412
#1	2030.9	10096.	10370.	10320.	492560.	215.12	49.31
#2	2024.8	10059.	10400.	10270.	485280.	187.00	44.40
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Fail
Value				1000.			1000.
Range				10.00%			-10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9780.9	10039.	72.852	7614.5	20181.	5089.0	1993.7
Stddev	51.1	28.	7.348	28.3	64.	14.8	4.7
%RSD	.52292	.27508	10.087	.37209	.31879	.29104	.23429
#1	9744.7	10058.	78.048	7634.5	20227.	5099.5	1997.0
#2	9817.1	10019.	67.656	7594.5	20136.	5078.5	1990.4
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: LR Acquired: 12/3/2007 13:25:35 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10810.	10090.	1983.0	306.09	10001.	2031.7	10298.
Stddev	26.	29.	3.1	8.19	58.	9.1	26.
%RSD	.24092	.29006	.15654	2.6748	.57658	.44807	.25138
#1	10791.	10111.	1980.8	300.30	9960.3	2038.2	10279.
#2	10828.	10070.	1985.2	311.88	10042.	2025.3	10316.
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Zn
Units	ppb
Avg	10043.
Stddev	26.
%RSD	.26094
#1	10062.
#2	10025.
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42059.	14553.	541980.
Stddev	78.	75.	689.
%RSD	.18661	.51377	.12710
#1	42003.	14500.	542470.
#2	42114.	14605.	541490.

Sample Name: PBLK Acquired: 12/3/2007 13:29:13 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06088	21.372	1.6878	.22741	1.0942	.07505	20.419	.17612
Stddev	.53550	31.642	1.3201	.43720	.1538	.00043	8.377	.06975
%RSD	879.56	148.05	78.213	192.25	14.056	.57768	41.027	39.606
#1	-.31777	43.747	.75439	.53656	1.2029	.07474	14.495	.22544
#2	.43953	-1.0019	2.6213	-.08174	.98542	.07535	26.342	.12680
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.56461	.74406	-.5468	59.737	-74.434	F 23.08	1.0329	4.6868
Stddev	.16753	.18768	.6286	12.238	78.583	8.79	.1440	.8252
%RSD	29.672	25.224	115.0	20.486	105.57	38.09	13.943	17.606
#1	.68307	.87677	-.9913	51.084	-130.00	16.86	1.1347	5.2703
#2	.44615	.61135	-.1023	68.391	-18.867	29.29	.93107	4.1034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13.690	.07802	.40767	-.81665	-3.4557	9.8461	.34359	.20229
Stddev	13.511	.34135	.41848	.11249	.1138	2.2595	.14710	.04156
%RSD	98.693	437.55	102.65	13.774	3.2937	22.948	42.812	20.545
#1	4.1361	.31939	.11176	-.73711	-3.3752	11.444	.44760	.23168
#2	23.243	-.16336	.70358	-.89619	-3.5362	8.2484	.23958	.17290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: PBLK Acquired: 12/3/2007 13:29:13 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.6356	1.2275	1.6217	.85464	-.37793
Stddev	.0799	.0616	.7408	.53913	.22797
%RSD	3.0327	5.0211	45.682	63.083	60.321
#1	-2.6922	1.2711	2.1455	1.2359	-.21673
#2	-2.5791	1.1839	1.0978	.47341	-.53913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43988.	14823.	558430.
Stddev	59.	131.	4477.
%RSD	.13343	.88285	.80174
#1	44030.	14731.	555270.
#2	43947.	14916.	561600.

Sample Name: CCV Acquired: 12/3/2007 13:32:29 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	517.53	50328.	507.46	511.02	499.95	50.261
Stddev	4.71	746.	4.11	2.25	2.13	.468
%RSD	.91042	1.4823	.80911	.44074	.42541	.93067
#1	520.86	49801.	510.36	512.61	501.45	50.591
#2	514.20	50856.	504.56	509.43	498.44	49.930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	99699.	495.45	496.96	504.98	506.7	48817.
Stddev	1822.	1.02	2.03	5.51	2.2	964.
%RSD	1.8272	.20686	.40923	1.0906	.4429	1.9757
#1	98411.	496.17	498.40	508.87	508.3	48135.
#2	100990.	494.72	495.53	501.08	505.1	49499.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24611.	F 100400.	500.38	507.13	101130.	498.38
Stddev	279.	878.	4.71	1.10	2284.	2.17
%RSD	1.1349	.8747	.94067	.21659	2.2590	.43507
#1	24414.	99790.	503.71	507.91	99510.	499.92
#2	24809.	101000.	497.05	506.36	102740.	496.85
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 13:32:29 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	495.19	515.51	505.75	528.99	498.97	500.56
Stddev	1.36	1.29	2.76	5.74	.95	2.39
%RSD	.27472	.25101	.54608	1.0852	.19132	.47711
#1	496.15	516.42	507.71	533.05	499.64	502.25
#2	494.23	514.59	503.80	524.93	498.29	498.87
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	500.68	515.97	494.89	506.92	514.48
Stddev	2.77	4.71	1.62	4.27	.89
%RSD	.55271	.91302	.32707	.84162	.17261
#1	502.63	519.30	496.03	509.93	515.11
#2	498.72	512.64	493.74	503.90	513.85
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42251.	15023.	541710.
Stddev	200.	203.	4646.
%RSD	.47263	1.3542	.85759
#1	42110.	15167.	538420.
#2	42392.	14879.	544990.

Sample Name: CCB Acquired: 12/3/2007 13:35:58 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.32972	-15.232	-.20007	-2.1497	-.02737	.00200	4.6485	-.03774
Stddev	.13933	16.348	1.9098	.6890	.00124	.00708	.0496	.07292
%RSD	42.256	107.33	954.56	32.051	4.5353	354.53	1.0662	193.22
#1	.23120	-26.791	-1.5505	-1.6625	-.02649	.00700	4.6835	-.08930
#2	.42824	-3.6716	1.1504	-2.6368	-.02825	-.00301	4.6134	.01382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08003	-.08076	.0799	-1.7235	-10.271	2.205	-.03813	1.2281
Stddev	.26331	.09527	1.454	1.0714	8.350	1.138	.03002	.0231
%RSD	329.03	117.97	1820.	62.166	81.293	51.60	78.741	1.8827
#1	.26622	-.01339	-.9484	-2.4812	-16.175	3.009	-.01690	1.2445
#2	-.10616	-.14813	1.108	-.96590	-4.3671	1.400	-.05936	1.2118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.114	-.37593	-.60749	.14611	-.18227	.66497	.39269	-.00219
Stddev	15.227	.15121	.45718	2.6265	1.9950	.46903	.14190	.00085
%RSD	28.669	40.224	75.258	1797.7	1094.5	70.535	36.136	38.648
#1	63.881	-.26900	-.28421	2.0033	-1.5930	.99663	.49303	-.00159
#2	42.346	-.48285	-.93076	-1.7111	1.2284	.33331	.29235	-.00279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 13:35:58 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.0466	.08344	.97197	-.25806	-.12701
Stddev	2.3962	.05824	.60742	.16453	.02608
%RSD	117.08	69.792	62.493	63.755	20.536
#1	-.35226	.12462	.54246	-.14172	-.14545
#2	-3.7410	.04226	1.4015	-.37440	-.10857
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43385.	14953.	555610.
Stddev	54.	14.	774.
%RSD	.12467	.09556	.13933
#1	43347.	14963.	555060.
#2	43423.	14943.	556160.

Sample Name: IDL-1 Acquired: 12/3/2007 13:39:16 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.17636	20.683	-.55459	-3.1523	-.03534	.01058	2.8182	.02548
Stddev	.13065	.850	.04497	.2444	.01993	.01238	.9484	.02769
%RSD	74.080	4.1111	8.1082	7.7530	56.393	117.02	33.654	108.68
#1	-.08398	20.082	-.52279	-2.9795	-.02125	.01934	2.1476	.04506
#2	-.26875	21.284	-.58639	-3.3252	-.04943	.00183	3.4889	.00590

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14801	-.08453	-1.116	4.4273	-51.468	-1.676	-.04463	.45603
Stddev	.03423	.12496	.337	6.5607	32.759	.218	.00626	.07885
%RSD	23.129	147.82	30.17	148.19	63.649	13.01	14.036	17.290
#1	-.17222	-.17290	-1.354	-.21181	-28.304	-1.522	-.04906	.51179
#2	-.12380	.00383	-.8778	9.0664	-74.632	-1.830	-.04020	.40028

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	43.403	-.68691	-.89932	-.50430	-1.1026	-.21035	-.21706	-.01405
Stddev	24.027	.05532	1.5606	1.2824	2.0623	.51771	.93373	.00017
%RSD	55.358	8.0532	173.53	254.29	187.05	246.11	430.17	1.2185
#1	26.414	-.72603	-2.0029	-1.4111	-2.5608	-.57643	-.87730	-.01417
#2	60.393	-.64780	.20420	.40249	.35574	.15572	.44318	-.01393

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.7159	.07039	.57373	-.24613	-.08328
Stddev	.6838	.10051	.26335	.00984	.00442
%RSD	18.403	142.79	45.901	3.9976	5.3022
#1	-3.2324	-.00068	.75994	-.25309	-.08640
#2	-4.1995	.14146	.38751	-.23917	-.08015

Sample Name: IDL-1 Acquired: 12/3/2007 13:39:16 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43491.	14721.	552740.
Stddev	36.	133.	364.
%RSD	.08295	.90089	.06585
#1	43465.	14627.	552480.
#2	43516.	14815.	552990.

Sample Name: IDL-2 Acquired: 12/3/2007 13:42:32 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12024	5.3817	.44377	-3.4840	.03558	.00646	.25319	.15338
Stddev	.01472	20.427	.54622	.1777	.00237	.00068	6.4714	.00480
%RSD	12.241	379.56	123.09	5.1001	6.6539	10.475	2556.0	3.1298
#1	.10983	19.826	.05753	-3.6096	.03725	.00598	-4.3228	.14998
#2	.13065	-9.0624	.83001	-3.3583	.03391	.00694	4.8292	.15677

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15723	.00531	-.2736	-6.5018	-60.082	-.3371	.03558	.40351
Stddev	.06942	.06423	.5026	7.5054	17.899	2.067	.05239	.22216
%RSD	44.155	1208.7	183.7	115.44	29.791	613.3	147.25	55.056
#1	.10814	.05073	.0818	-11.809	-47.425	-1.799	-.00147	.56060
#2	.20632	-.04010	-.6289	-1.1947	-72.739	1.125	.07262	.24642

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	45.492	-.19260	-.16779	-.90842	-1.8744	.10859	-.28433	.01692
Stddev	4.172	.12249	1.4766	.14978	.9576	.30443	.52044	.00749
%RSD	9.1699	63.597	880.05	16.488	51.088	280.36	183.04	44.287
#1	48.442	-.10599	.87634	-.80250	-2.5515	-.10668	-.65234	.01162
#2	42.543	-.27922	-1.2119	-1.0143	-1.1973	.32385	.08367	.02222

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.7028	.17674	-1.0180	.00804	-.05642
Stddev	.1973	.09676	2.2060	.08573	.00925
%RSD	7.2998	54.749	216.69	1067.0	16.403
#1	-2.8423	.24516	.54183	-.05259	-.04987
#2	-2.5633	.10832	-2.5779	.06866	-.06296

Sample Name: IDL-2 Acquired: 12/3/2007 13:42:32 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43484.	15058.	548030.
Stddev	99.	291.	530.
%RSD	.22865	1.9355	.09665
#1	43554.	15264.	547660.
#2	43413.	14852.	548410.

Sample Name: IDL-3 Acquired: 12/3/2007 13:45:50 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20854	-10.416	1.9588	-4.0564	-.06509	-.00374	1.5593	-.16122
Stddev	.03628	37.622	1.6366	.7329	.02583	.00882	1.7742	.04225
%RSD	17.397	361.21	83.548	18.069	39.689	235.74	113.79	26.207
#1	.23420	16.187	.80161	-3.5381	-.04682	.00249	.30470	-.19109
#2	.18289	-37.018	3.1161	-4.5746	-.08335	-.00998	2.8138	-.13134

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14610	-.55794	-.8082	-5.2931	-93.393	-3.086	.01434	.08146
Stddev	.24022	.17579	.5011	6.6505	8.783	.165	.01038	.14123
%RSD	164.42	31.507	62.00	125.64	9.4039	5.343	72.398	173.38
#1	.31596	-.43363	-1.162	-.59054	-87.183	-2.970	.00700	-.01841
#2	-.02376	-.68224	-.4538	-9.9957	-99.604	-3.203	.02168	.18133

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	63.546	.07728	-.38964	1.4038	.97162	-.22246	.04401	-.00145
Stddev	16.489	.27171	.60210	1.0206	2.9587	1.3227	.32618	.00590
%RSD	25.949	351.61	154.53	72.704	304.51	594.60	741.20	406.58
#1	75.205	-.11485	.03611	2.1255	3.0637	-1.1578	.27465	.00272
#2	51.886	.26941	-.81539	.68211	-1.1205	.71286	-.18664	-.00562

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.3466	-.03257	-1.5643	-.30432	.52373
Stddev	2.3854	.04657	1.1354	.24903	.18254
%RSD	101.65	142.97	72.577	81.832	34.855
#1	-4.0334	-.06550	-.76152	-.48041	.39465
#2	-.65991	.00036	-2.3672	-.12823	.65280

Sample Name: IDL-3 Acquired: 12/3/2007 13:45:50 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43422.	14930.	556010.
Stddev	68.	221.	3284.
%RSD	.15770	1.4819	.59056
#1	43374.	14774.	553690.
#2	43471.	15087.	558330.

Sample Name: IDL-4 Acquired: 12/3/2007 13:49:06 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.09114	-33.984	.19918	-4.4713	-.05896	-.00001	-6.0771	.08571
Stddev	.41073	5.817	1.6566	.2888	.01111	.00589	1.4368	.02900
%RSD	450.66	17.116	831.73	6.4582	18.845	59436.	23.643	33.838
#1	-.19929	-29.871	-.97224	-4.2671	-.06682	.00416	-7.0930	.10622
#2	.38157	-38.097	1.3706	-4.6755	-.05111	-.00418	-5.0611	.06520

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12400	-.17737	-1.028	-9.1518	9.8071	-3.928	-.09990	.04558
Stddev	.03483	.08681	.457	6.3923	38.964	.437	.00607	.41016
%RSD	28.092	48.941	44.39	69.847	397.31	11.13	6.0790	899.85
#1	-.14863	-.23875	-1.351	-13.672	-17.745	-3.618	-.10419	-.24444
#2	-.09937	-.11599	-.7056	-4.6318	37.359	-4.237	-.09560	.33560

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	16.417	-.53749	-.23790	.95214	-.53097	-.44313	.10755	-.03437
Stddev	16.063	.31930	.40541	1.8363	2.7937	.12039	.30430	.00594
%RSD	97.843	59.405	170.41	192.86	526.16	27.167	282.93	17.281
#1	5.0589	-.31172	-.52456	-.34630	1.4445	-.35801	.32272	-.03857
#2	27.775	-.76327	.04877	2.2506	-2.5064	-.52826	-.10762	-.03017

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.2046	.02600	.53181	-.12660	-.23951
Stddev	1.4033	.01078	.75817	.00703	.08127
%RSD	43.791	41.454	142.56	5.5540	33.932
#1	-2.2123	.01838	-.00429	-.12163	-.29697
#2	-4.1969	.03362	1.0679	-.13157	-.18204

Sample Name: IDL-4 Acquired: 12/3/2007 13:49:06 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43442.	15228.	553740.
Stddev	119.	300.	2334.
%RSD	.27377	1.9731	.42149
#1	43358.	15440.	555390.
#2	43526.	15015.	552090.

Sample Name: IDL-5 Acquired: 12/3/2007 13:52:22 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21213	-11.262	.66232	-4.8613	-.04269	.00961	.62944	-.01101
Stddev	.16047	5.432	.13909	.1523	.01499	.01328	7.8081	.10671
%RSD	75.649	48.231	21.000	3.1322	35.103	138.23	1240.5	968.80
#1	.32559	-7.4213	.76067	-4.7537	-.03210	.01900	6.1506	.06444
#2	.09866	-15.103	.56397	-4.9690	-.05329	.00022	-4.8917	-.08647

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03219	-.10894	-.0260	-4.3602	-68.099	-3.535	-.05276	.05027
Stddev	.35143	.07060	1.199	.7776	29.548	.016	.03342	.08399
%RSD	1091.6	64.809	4620.	17.834	43.390	.4481	63.340	167.08
#1	-.21630	-.05902	.8221	-4.9101	-88.992	-3.546	-.07639	-.00912
#2	.28069	-.15886	-.8740	-3.8103	-47.205	-3.524	-.02913	.10966

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18.734	-.63447	.02468	-.43271	-.25261	-.45969	-.10854	-.01567
Stddev	3.617	.19724	2.4184	.08629	1.5793	.96005	.58378	.00135
%RSD	19.305	31.088	9797.8	19.941	625.19	208.85	537.85	8.5889
#1	21.291	-.77394	1.7348	-.37170	.86411	-1.1385	.30426	-.01663
#2	16.177	-.49500	-1.6854	-.49373	-1.3693	.21917	-.52133	-.01472

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.5543	.10598	1.1209	-.14767	-.07373
Stddev	1.7445	.02549	.7606	.11708	.10218
%RSD	112.24	24.056	67.858	79.281	138.59
#1	-.32074	.08795	1.6587	-.06489	-.00148
#2	-2.7878	.12401	.58305	-.23046	-.14598

Sample Name: IDL-5 Acquired: 12/3/2007 13:52:22 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43352.	15180.	551050.
Stddev	106.	191.	150.
%RSD	.24556	1.2607	.02716
#1	43427.	15315.	550950.
#2	43277.	15044.	551160.

Sample Name: IDL-6 Acquired: 12/3/2007 13:55:39 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07042	-7.9693	-1.4892	-5.2403	-.09128	.00617	-.31894	.02960
Stddev	.31123	34.949	1.2703	.5400	.03303	.00209	2.0371	.11732
%RSD	441.93	438.55	85.295	10.304	36.183	33.905	638.69	396.35
#1	-.29049	-32.682	-.59104	-4.8585	-.06793	.00764	-1.7594	-.05336
#2	.14965	16.744	-2.3874	-5.6221	-.11464	.00469	1.1215	.11256

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.06628	-.50054	.2850	-10.365	-27.658	-3.678	-.06325	.05748
Stddev	.01186	.18106	.5038	2.607	13.488	.102	.00531	.18785
%RSD	17.887	36.174	176.8	25.156	48.769	2.782	8.3899	326.81
#1	-.07467	-.62857	.6413	-12.209	-18.120	-3.605	-.06700	.19031
#2	-.05790	-.37251	-.0712	-8.5213	-37.196	-3.750	-.05949	-.07535

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	28.527	-.16591	-1.2512	-.89823	-2.6672	-1.0309	.32428	-.02501
Stddev	1.244	.18251	.5880	.70291	.4590	.0707	.32382	.00123
%RSD	4.3622	110.00	46.991	78.255	17.207	6.8634	99.858	4.9188
#1	29.407	-.29496	-1.6670	-1.3953	-2.3426	-.98083	.55325	-.02588
#2	27.647	-.03686	-.83546	-.40120	-2.9917	-1.0809	.09530	-.02414

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.2286	.05508	-.59712	-.31747	-.22598
Stddev	.7911	.09632	1.1088	.00011	.09139
%RSD	64.388	174.86	185.69	.03433	40.441
#1	-.66920	-.01302	.18693	-.31755	-.29060
#2	-1.7879	.12319	-1.3812	-.31740	-.16136

Sample Name: IDL-6 Acquired: 12/3/2007 13:55:39 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43528.	15329.	555530.
Stddev	30.	354.	5947.
%RSD	.06859	2.3083	1.0706
#1	43549.	15579.	551330.
#2	43507.	15078.	559740.

Sample Name: IDL-7 Acquired: 12/3/2007 13:58:55 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07639	-6.1146	.22489	-5.7633	-.06429	.00810	-5.7960	-.00145
Stddev	.05079	17.213	2.6844	.6893	.03473	.00163	6.1484	.05481
%RSD	66.477	281.50	1193.6	11.961	54.015	20.088	106.08	3775.2
#1	-.04048	6.0566	2.1230	-6.2508	-.03973	.00925	-1.4484	.03731
#2	-.11231	-18.286	-1.6733	-5.2759	-.08884	.00695	-10.144	-.04021

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16670	-.37745	.1419	-10.486	-100.17	-3.728	-.05656	-.09211
Stddev	.01686	.12535	1.870	5.695	67.69	.219	.00902	.37168
%RSD	10.114	33.209	1318.	54.308	67.571	5.872	15.950	403.52
#1	-.15478	-.28882	-1.181	-14.513	-52.310	-3.573	-.06294	-.35492
#2	-.17862	-.46609	1.464	-6.4595	-148.03	-3.883	-.05018	.17071

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24.541	-.30247	.04737	.66735	-.69776	-.57557	-.27048	-.02891
Stddev	10.597	.11601	.77247	.23382	3.3752	.25636	.19394	.00425
%RSD	43.181	38.354	1630.7	35.038	483.72	44.541	71.702	14.713
#1	17.048	-.38450	.59359	.50201	-3.0844	-.75684	-.40761	-.02590
#2	32.034	-.22044	-.49885	.83269	1.6889	-.39429	-.13334	-.03192

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	.64802	.02362	-.81255	-.18733	-.12217
Stddev	.85968	.03183	.94864	.16676	.09182
%RSD	132.66	134.74	116.75	89.017	75.152
#1	.04013	.04613	-1.4833	-.06942	-.18710
#2	1.2559	.00112	-.14177	-.30525	-.05725

Sample Name: IDL-7 Acquired: 12/3/2007 13:58:55 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43617.	15414.	560500.
Stddev	76.	685.	4277.
%RSD	.17408	4.4442	.76307
#1	43564.	15898.	557480.
#2	43671.	14930.	563520.

Sample Name: CCV Acquired: 12/3/2007 14:12:19 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	519.21	50544.	508.82	508.91	498.94	50.395
Stddev	4.05	812.	.34	.15	3.77	.505
%RSD	.77941	1.6063	.06730	.03015	.75479	1.0030
#1	516.35	49970.	508.57	508.80	496.28	50.038
#2	522.07	51118.	509.06	509.02	501.60	50.753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	100240.	496.99	498.10	507.80	509.7	49162.
Stddev	1740.	.06	.14	4.20	.0	842.
%RSD	1.7355	.01126	.02766	.82707	.0048	1.7120
#1	99008.	497.03	498.20	504.83	509.8	48567.
#2	101470.	496.95	498.01	510.77	509.7	49758.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24933.	F 100900.	501.92	507.81	102520.	500.38
Stddev	510.	2401.	4.38	1.31	1932.	.41
%RSD	2.0467	2.380	.87209	.25805	1.8844	.08278
#1	24572.	99170.	498.83	508.73	101160.	500.68
#2	25294.	102600.	505.02	506.88	103890.	500.09
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 14:12:19 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	495.88	517.70	508.06	527.62	503.28	500.89
Stddev	1.32	2.86	3.48	3.88	1.54	10.00
%RSD	.26616	.55199	.68503	.73469	.30517	1.9964
#1	496.81	519.72	510.53	524.88	504.36	493.81
#2	494.94	515.68	505.60	530.36	502.19	507.96
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	502.01	517.45	496.62	508.58	515.54
Stddev	.46	4.62	1.11	4.26	.43
%RSD	.09140	.89263	.22271	.83666	.08303
#1	502.33	514.18	497.40	505.57	515.85
#2	501.68	520.72	495.84	511.59	515.24
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42369.	14722.	543320.
Stddev	26.	127.	5939.
%RSD	.06188	.86273	1.0931
#1	42351.	14812.	547520.
#2	42388.	14632.	539120.

Sample Name: CCB Acquired: 12/3/2007 14:15:48 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.50134	10.186	-.50605	-5.8665	.05112	.00294	3.9285	.16292
Stddev	.28752	6.462	.35123	.0772	.02608	.00567	.8927	.11432
%RSD	57.349	63.441	69.405	1.3156	51.020	192.58	22.725	70.173
#1	.29803	5.6169	-.75440	-5.8119	.03268	.00695	4.5598	.08208
#2	.70464	14.756	-.25770	-5.9211	.06956	-.00106	3.2972	.24376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01467	.10595	-2.058	3.5417	-14.710	F 8.744	.07028	.66447
Stddev	.11678	.09656	.831	.1981	98.618	2.371	.05977	.22178
%RSD	796.10	91.134	40.37	5.5938	670.40	27.12	85.045	33.377
#1	-.06791	.03768	-1.470	3.6818	55.023	10.42	.02801	.82129
#2	.09725	.17423	-2.645	3.4016	-84.444	7.067	.11254	.50764
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	99.645	-.40255	.04303	-.80895	-.09242	.07623	.11399	.05367
Stddev	10.376	.43900	.32774	.09376	3.4776	.28237	.17512	.03282
%RSD	10.413	109.05	761.67	11.590	3762.9	370.42	153.63	61.150
#1	106.98	-.09213	.27477	-.87525	2.3666	-.12344	.23782	.03046
#2	92.308	-.71297	-.18872	-.74265	-2.5515	.27590	-.00984	.07688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 14:15:48 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.3195	.33971	-1.0576	-.20552	-.04664
Stddev	1.9735	.13378	.7463	.10607	.09379
%RSD	59.451	39.382	70.568	51.610	201.12
#1	-4.7150	.24511	-.52984	-.13052	.01969
#2	-1.9241	.43431	-1.5853	-.28052	-.11296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43175.	14934.	551450.
Stddev	128.	427.	5028.
%RSD	.29609	2.8603	.91169
#1	43085.	15236.	547900.
#2	43266.	14632.	555010.

Sample Name: CCV Acquired: 12/3/2007 14:52:22 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	536.93	53101.	528.87	524.18	520.00	51.970
Stddev	.93	799.	3.23	1.80	1.77	.004
%RSD	.17395	1.5050	.60992	.34262	.33956	.00719
#1	537.59	53667.	531.16	525.45	518.75	51.968
#2	536.27	52536.	526.59	522.91	521.25	51.973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	105500.	516.55	516.84	523.84	527.5	51738.
Stddev	1663.	.28	.27	.90	3.7	912.
%RSD	1.5759	.05489	.05250	.17157	.7075	1.7618
#1	106680.	516.75	517.03	523.21	530.1	52382.
#2	104330.	516.35	516.65	524.48	524.8	51093.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26375.	F 107200.	523.19	526.44	109440.	519.63
Stddev	344.	1830.	.50	.11	1831.	.24
%RSD	1.3060	1.707	.09518	.02018	1.6729	.04573
#1	26619.	108500.	523.54	526.37	110730.	519.80
#2	26132.	105900.	522.84	526.52	108150.	519.47
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 14:52:22 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	511.62	537.95	527.07	F 550.04	521.58	520.47
Stddev	1.48	2.08	5.12	2.13	.21	3.01
%RSD	.28889	.38585	.97050	.38683	.04116	.57838
#1	512.67	539.41	530.69	551.54	521.43	522.60
#2	510.58	536.48	523.46	548.54	521.73	518.34
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				500.00		
Range				10.000%		

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	521.92	534.01	512.94	527.59	533.06
Stddev	.95	.32	1.16	.70	1.00
%RSD	.18131	.05989	.22680	.13271	.18695
#1	522.59	533.78	512.12	528.09	533.77
#2	521.25	534.24	513.77	527.10	532.36
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	41654.	14087.	532000.
Stddev	3.	205.	577.
%RSD	.00753	1.4556	.10846
#1	41656.	13942.	531590.
#2	41652.	14232.	532410.

Sample Name: CCB Acquired: 12/3/2007 14:55:52 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01115	-10.901	1.3750	-6.2028	.03069	.01945	2.4303	.09692
Stddev	.35992	25.674	.1734	.5259	.06170	.00409	5.1644	.01352
%RSD	3227.6	235.52	12.609	8.4788	201.02	21.032	212.50	13.951
#1	.24335	7.2533	1.4976	-5.8309	-.01294	.01656	6.0821	.10648
#2	-.26565	-29.055	1.2524	-6.5747	.07432	.02234	-1.2214	.08736
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15276	-.14674	-.5631	4.2728	14.904	F 3.095	.03753	.44006
Stddev	.13139	.10807	.7106	5.4799	45.452	.918	.09078	.27848
%RSD	86.017	73.646	126.2	128.25	304.96	29.68	241.89	63.283
#1	.24567	-.22316	-1.066	8.1476	-17.235	2.445	-.02666	.63697
#2	.05985	-.07033	-.0607	.39790	47.044	3.744	.10172	.24314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	89.390	-.21040	-.53526	-1.6562	-1.3531	.05022	.38979	.03238
Stddev	27.045	.10428	.14525	1.7612	.4547	.18150	.41040	.03398
%RSD	30.254	49.562	27.137	106.34	33.606	361.41	105.29	104.94
#1	70.267	-.13667	-.63797	-2.9016	-1.0315	.17856	.09959	.00835
#2	108.51	-.28414	-.43255	-.41091	-1.6746	-.07812	.67999	.05640
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 14:55:52 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.7461	.42155	-.10130	-.01561	-.05442
Stddev	.9764	.27487	.81038	.25452	.00759
%RSD	26.065	65.206	799.94	1630.2	13.949
#1	-4.4365	.22718	.47172	-.19559	-.05978
#2	-3.0556	.61591	-.67433	.16436	-.04905
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43315.	14968.	551720.
Stddev	141.	601.	163.
%RSD	.32625	4.0135	.02952
#1	43215.	15393.	551600.
#2	43415.	14544.	551830.

Sample Name: CCV Acquired: 12/3/2007 15:32:30 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	529.04	51393.	518.61	512.73	509.61	51.535
Stddev	2.03	837.	4.35	1.95	3.65	.246
%RSD	.38335	1.6279	.83789	.38018	.71706	.47782
#1	527.61	50801.	521.68	514.11	507.03	51.361
#2	530.48	51985.	515.54	511.35	512.20	51.709
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199.	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	101300.	508.30	506.44	515.77	514.7	49610.
Stddev	1930.	1.28	.72	2.70	2.6	978.
%RSD	1.9055	.25111	.14154	.52415	.4986	1.9709
#1	99935.	509.21	506.94	513.86	516.5	48919.
#2	102660.	507.40	505.93	517.68	512.9	50301.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25255.	F 101700.	509.81	518.14	104140.	506.56
Stddev	336.	196.	2.34	1.27	1801.	.95
%RSD	1.3311	.1931	.45872	.24557	1.7297	.18671
#1	25017.	101500.	508.16	519.04	102870.	507.22
#2	25493.	101800.	511.46	517.24	105420.	505.89
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 15:32:30 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	507.46	525.62	518.09	539.13	511.20	511.57
Stddev	1.78	.71	1.31	2.72	.65	3.55
%RSD	.35074	.13585	.25311	.50520	.12742	.69322
#1	508.71	526.13	519.02	537.20	511.66	509.07
#2	506.20	525.12	517.16	541.05	510.74	514.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	509.51	525.98	509.29	518.34	521.47
Stddev	1.66	2.93	1.44	2.56	.74
%RSD	.32540	.55706	.28222	.49365	.14107
#1	510.68	523.91	510.30	516.53	521.99
#2	508.33	528.06	508.27	520.15	520.95
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42079.	14541.	538910.
Stddev	67.	165.	2715.
%RSD	.15831	1.1365	.50386
#1	42126.	14658.	540830.
#2	42032.	14424.	536990.

Sample Name: CCB Acquired: 12/3/2007 15:36:00 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13690	.80917	-.24744	-8.4100	-.03019	.00430	4.7056	-.02207
Stddev	.19806	18.120	2.4027	.0930	.04063	.01272	3.9333	.00050
%RSD	144.68	2239.3	971.03	1.1053	134.58	295.99	83.587	2.2526
#1	-.00316	13.622	-1.9464	-8.3443	-.00146	.01330	1.9244	-.02171
#2	.27695	-12.003	1.4516	-8.4757	-.05891	-.00470	7.4869	-.02242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08203	-.06933	-.5655	2.4583	-82.092	1.494	.04638	.66819
Stddev	.13153	.09329	.7150	3.5820	10.328	.012	.01231	.22825
%RSD	160.36	134.56	126.4	145.71	12.582	.7783	26.530	34.159
#1	.17503	-.00337	-1.071	4.9912	-74.788	1.486	.03768	.82959
#2	-.01098	-.13530	-.0599	-.07454	-89.395	1.502	.05508	.50679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50.489	-.39939	.33146	-.74711	-1.9504	-.24742	.06573	.00197
Stddev	12.783	.17498	1.3095	.58344	1.4265	.31703	.34751	.00400
%RSD	25.318	43.812	395.06	78.093	73.139	128.14	528.72	202.90
#1	41.450	-.27566	-.59447	-1.1597	-.94173	-.47159	-.18000	-.00086
#2	59.528	-.52312	1.2574	-.33455	-2.9591	-.02324	.31145	.00480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 15:36:00 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.9971	.38547	-.91492	.01074	-.05294
Stddev	2.7703	.07630	.30181	.11025	.09760
%RSD	138.71	19.795	32.988	1026.7	184.37
#1	-.03823	.43942	-1.1283	.08869	.01608
#2	-3.9560	.33152	-.70151	-.06722	-.12195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43133.	14306.	543980.
Stddev	214.	90.	1369.
%RSD	.49603	.62729	.25163
#1	42982.	14369.	543020.
#2	43285.	14242.	544950.

Sample Name: CCV Acquired: 12/3/2007 16:12:18 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	529.83	52230.	525.51	516.08	512.60	51.715
Stddev	3.06	304.	1.65	1.90	4.91	.380
%RSD	.57783	.58237	.31361	.36785	.95742	.73407
#1	527.66	52015.	526.67	517.42	509.13	51.447
#2	531.99	52445.	524.34	514.74	516.07	51.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	103200.	512.91	510.23	512.18	517.2	50597.
Stddev	624.	.72	1.43	3.06	2.0	323.
%RSD	.60418	.13974	.27949	.59672	.3780	.63825
#1	102760.	513.42	511.24	510.02	518.6	50368.
#2	103640.	512.40	509.22	514.34	515.8	50825.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25758.	F 102100.	509.54	523.70	106130.	507.50
Stddev	191.	307.	3.06	1.74	622.	1.27
%RSD	.74027	.3008	.60022	.33167	.58613	.24933
#1	25623.	101900.	507.38	524.93	105690.	508.40
#2	25893.	102400.	511.70	522.48	106570.	506.61
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 16:12:18 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	512.21	526.70	524.20	537.49	517.80	513.48
Stddev	1.78	.17	3.61	3.92	.53	7.32
%RSD	.34702	.03234	.68949	.72905	.10296	1.4249
#1	510.95	526.82	526.75	534.72	517.42	508.30
#2	513.46	526.58	521.64	540.26	518.17	518.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	514.67	524.05	515.08	520.21	521.89
Stddev	.29	3.53	2.15	2.87	.47
%RSD	.05540	.67450	.41806	.55244	.08980
#1	514.47	521.55	513.56	518.18	522.22
#2	514.87	526.55	516.60	522.25	521.56
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42096.	14201.	540930.
Stddev	121.	93.	3328.
%RSD	.28673	.65467	.61530
#1	42011.	14267.	543290.
#2	42182.	14136.	538580.

Sample Name: CCB Acquired: 12/3/2007 16:15:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11901	-13.349	-.80653	-9.3668	.01251	.01479	9.7449	.14013
Stddev	.16676	8.038	.39031	.2698	.01502	.00594	.6427	.04030
%RSD	140.12	60.216	48.394	2.8799	120.07	40.151	6.5956	28.756
#1	.23693	-19.033	-1.0825	-9.5576	.00189	.01899	10.199	.16863
#2	.00110	-7.6651	-.53054	-9.1761	.02313	.01059	9.2905	.11164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14797	-.15998	-2.043	1.6509	23.368	F 6.105	.01874	.44788
Stddev	.10654	.11216	.678	5.0637	38.192	.807	.00949	.12797
%RSD	71.999	70.110	33.22	306.72	163.44	13.22	50.657	28.572
#1	.22331	-.23928	-2.522	5.2315	50.374	6.676	.02545	.35739
#2	.07264	-.08067	-1.563	-1.9297	-3.6381	5.534	.01203	.53837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	79.847	-.25039	-.45273	-.63734	-2.8226	-.01996	-.15766	.03110
Stddev	10.453	.13496	.85900	.50714	1.2697	1.5203	.47800	.03454
%RSD	13.091	53.900	189.74	79.571	44.983	7618.5	303.18	111.04
#1	87.238	-.34582	.15467	-.27874	-3.7205	-1.0950	.18034	.00668
#2	72.456	-.15496	-1.0601	-.99594	-1.9248	1.0551	-.49566	.05553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 16:15:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Tl	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.9927	.32576	-1.0338	-.04669	.16396
Stddev	.4465	.05951	.0592	.04325	.05905
%RSD	14.920	18.267	5.7297	92.646	36.012
#1	-3.3085	.36784	-1.0756	-.01610	.12221
#2	-2.6770	.28369	-.99188	-.07727	.20572
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42893.	14096.	545080.
Stddev	51.	212.	2865.
%RSD	.11834	1.5020	.52558
#1	42929.	13947.	547110.
#2	42857.	14246.	543060.

Sample Name: CCV Acquired: 12/3/2007 16:52:37 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	526.05	51526.	531.76	517.10	503.99	51.718
Stddev	1.14	703.	1.11	.97	2.61	.014
%RSD	.21620	1.3641	.20804	.18707	.51736	.02708
#1	526.85	51029.	530.98	517.78	505.84	51.709
#2	525.24	52023.	532.54	516.42	502.15	51.728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	101780.	515.82	510.06	507.78	517.1	49796.
Stddev	1667.	1.37	1.32	.43	1.2	843.
%RSD	1.6374	.26519	.25962	.08454	.2223	1.6927
#1	100610.	516.79	510.99	507.48	516.3	49200.
#2	102960.	514.85	509.12	508.08	517.9	50392.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25171.	F 100000.	504.53	527.08	104910.	506.15
Stddev	297.	2349.	1.04	.05	1699.	.34
%RSD	1.1785	2.349	.20611	.00901	1.6191	.06626
#1	24962.	98360.	505.26	527.12	103710.	506.39
#2	25381.	101700.	503.79	527.05	106110.	505.91
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 16:52:37 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	515.81	526.56	526.28	533.96	520.12	506.17
Stddev	.88	1.69	2.10	.90	1.28	3.79
%RSD	.17008	.32039	.39897	.16807	.24551	.74825
#1	515.19	527.76	527.77	533.33	521.03	508.85
#2	516.43	525.37	524.80	534.60	519.22	503.49
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	517.95	519.68	522.57	518.17	519.45
Stddev	.34	.02	3.66	.87	1.17
%RSD	.06492	.00455	.70008	.16755	.22583
#1	517.72	519.67	525.16	517.55	520.28
#2	518.19	519.70	519.99	518.78	518.62
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42188.	14349.	543600.
Stddev	21.	266.	274.
%RSD	.04886	1.8534	.05048
#1	42174.	14537.	543800.
#2	42203.	14161.	543410.

Sample Name: CCB Acquired: 12/3/2007 16:56:06 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12585	30.704	.36864	-9.9046	.00057	.00858	15.902	.11558
Stddev	.57787	6.045	1.6438	.1047	.02658	.00753	1.884	.02917
%RSD	459.19	19.689	445.92	1.0566	4702.9	87.809	11.845	25.234
#1	.53446	34.978	-.79371	-9.8306	.01936	.00325	17.234	.13621
#2	-.28277	26.429	1.5310	-9.9786	-.01823	.01391	14.570	.09496
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11005	-.22141	-.8019	9.0604	10.055	F 7.370	.09348	.42945
Stddev	.03825	.19713	.1820	3.8220	30.784	.571	.05580	.15335
%RSD	34.760	89.033	22.70	42.184	306.16	7.746	59.694	35.710
#1	.13710	-.36080	-.9306	6.3578	-11.713	7.774	.05402	.32101
#2	.08300	-.08202	-.6732	11.763	31.822	6.967	.13294	.53789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	81.022	.08225	1.0585	-.97165	-2.6445	.05076	.60506	.02692
Stddev	22.715	.03060	.6512	.08245	.1276	.52193	.61413	.00608
%RSD	28.036	37.201	61.524	8.4854	4.8264	1028.2	101.50	22.579
#1	97.084	.10389	.59799	-1.0299	-2.5543	-.31830	1.0393	.03121
#2	64.960	.06061	1.5189	-.91335	-2.7348	.41982	.17081	.02262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 16:56:06 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.1207	.31389	-1.5064	.08408	.04165
Stddev	1.2911	.05997	1.3537	.10278	.00155
%RSD	60.884	19.107	89.867	122.24	3.7301
#1	-1.2077	.27148	-2.4636	.01140	.04055
#2	-3.0336	.35630	-.54915	.15675	.04274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43059.	14018.	553980.
Stddev	95.	137.	135.
%RSD	.22117	.97745	.02441
#1	42992.	13921.	553880.
#2	43126.	14115.	554070.

Sample Name: BLK101469 Acquired: 12/3/2007 17:29:28 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.06595	17.364	-3.6142	-7.4701	.01190	.02092	17.820
Stddev	.17685	25.489	1.3415	.3145	.00369	.00617	5.177
%RSD	268.17	146.79	37.117	4.2098	31.011	29.482	29.049
#1	-.19100	-.65940	-4.5627	-7.2477	.00929	.01656	14.159
#2	.05910	35.388	-2.6656	-7.6924	.01451	.02528	21.480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.04812	-.21161	1.5013	-.9357	19.933	-50.631	-1.335
Stddev	.01675	.18177	.2076	.4339	5.828	14.032	.012
%RSD	34.813	85.901	13.828	46.37	29.238	27.715	.8923
#1	-.05996	-.08307	1.6481	-1.242	24.054	-40.708	-1.344
#2	-.03627	-.34014	1.3545	-.6289	15.812	-60.553	-1.327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.22451	.08078	29.952	-.57708	.17319	2.0351	.77219
Stddev	.00805	.00570	3.432	.07465	.64343	1.8080	.69165
%RSD	3.5860	7.0535	11.459	12.937	371.51	88.841	89.569
#1	.23021	.07675	32.379	-.52429	.62817	3.3135	1.2613
#2	.21882	.08481	27.525	-.62987	-.28178	.75664	.28313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: BLK101469 Acquired: 12/3/2007 17:29:28 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8.0727	F 28.345	.03040	-6.2156	1.3278	-3.5731	-.19827
Stddev	.6397	.441	.00731	.2316	.0140	.9098	.00060
%RSD	7.9242	1.5552	24.037	3.7265	1.0575	25.464	.30485
#1	8.5251	28.656	.02523	-6.0518	1.3377	-4.2164	-.19784
#2	7.6204	28.033	.03557	-6.3794	1.3179	-2.9297	-.19870
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		20.000					
Low Limit		-20.000					

Elem	Zn
Units	ppb
Avg	4.9493
Stddev	.0533
%RSD	1.0766
#1	4.9870
#2	4.9117
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	41759.	14085.	545580.
Stddev	65.	312.	4124.
%RSD	.15577	2.2135	.75591
#1	41713.	14305.	542660.
#2	41805.	13864.	548500.

Sample Name: CCV Acquired: 12/3/2007 17:32:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	527.74	51224.	531.44	516.76	506.12	51.914	100870.
Stddev	2.86	2017.	1.81	1.21	8.81	.404	3479.
%RSD	.54235	3.9383	.33969	.23504	1.7415	.77745	3.4494
#1	525.72	49797.	532.71	515.90	499.89	51.629	98407.
#2	529.77	52650.	530.16	517.62	512.35	52.200	103330.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	517.52	510.85	510.15	517.5	49231.	25171.	F 99360.
Stddev	.97	.20	4.00	3.1	1582.	827.	2565.
%RSD	.18744	.03926	.78443	.5917	3.2142	3.2859	2.582
#1	518.21	510.99	507.32	515.4	48112.	24586.	97540.
#2	516.84	510.71	512.98	519.7	50350.	25756.	101200.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							500.0
Range							10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	505.55	528.18	103680.	505.89	516.35	527.65	524.22
Stddev	2.37	.36	3055.	1.10	.00	2.27	3.06
%RSD	.46791	.06906	2.9461	.21687	.00074	.43040	.58438
#1	503.88	528.43	101520.	506.66	516.35	526.04	526.39
#2	507.22	527.92	105840.	505.11	516.36	529.25	522.06
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 12/3/2007 17:32:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	533.84	520.98	509.71	517.99	523.57	522.26	519.36
Stddev	3.02	.03	4.22	2.16	3.51	2.52	3.21
%RSD	.56507	.00603	.82712	.41733	.67038	.48155	.61811
#1	531.70	521.00	506.73	516.46	521.09	524.04	517.09
#2	535.97	520.96	512.69	519.52	526.06	520.48	521.63
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Zn
Units	ppb
Avg	520.24
Stddev	.33
%RSD	.06426
#1	520.47
#2	520.00
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42732.	14408.	551710.
Stddev	74.	443.	3375.
%RSD	.17406	3.0738	.61173
#1	42679.	14721.	554090.
#2	42784.	14095.	549320.

Sample Name: CCB Acquired: 12/3/2007 17:36:16 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21078	27.186	.08240	-10.611	-.00223	.00886	20.720	.11154
Stddev	.03241	22.384	1.1971	.477	.01292	.00257	1.490	.02672
%RSD	15.375	82.339	1452.7	4.4985	579.78	28.959	7.1935	23.953
#1	.18787	43.014	.92885	-10.274	.00691	.00705	21.774	.13043
#2	.23370	11.357	-.76404	-10.949	-.01137	.01068	19.666	.09265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.15570	-.15887	.1164	12.342	20.027	F 14.50	.07966	.34121
Stddev	.08516	.40909	.4171	5.554	92.482	.04	.00361	.19780
%RSD	54.697	257.49	358.4	45.000	461.78	.2564	4.5367	57.971
#1	-.09548	-.44814	.4113	16.269	85.422	14.47	.07711	.20134
#2	-.21591	.13040	-.1785	8.4147	-45.367	14.52	.08222	.48108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	87.169	-.03803	-.58315	-.60707	1.1420	-.77766	.41565	.05138
Stddev	25.909	.13398	1.0960	1.2950	.3883	.57359	.06074	.00290
%RSD	29.723	352.26	187.95	213.31	34.000	73.758	14.613	5.6515
#1	105.49	.05671	.19184	.30860	.86746	-.37207	.37270	.05343
#2	68.848	-.13278	-1.3581	-1.5227	1.4166	-1.1832	.45860	.04933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 17:36:16 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.8217	.35978	-.16826	-.05908	.19767
Stddev	.1072	.07636	.10296	.18032	.04719
%RSD	3.8001	21.223	61.192	305.20	23.874
#1	-2.7459	.41377	-.09546	.06842	.23104
#2	-2.8975	.30579	-.24107	-.18658	.16430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	44381.	14549.	568120.
Stddev	87.	549.	6352.
%RSD	.19696	3.7723	1.1181
#1	44319.	14937.	563620.
#2	44443.	14161.	572610.

Sample Name: BKS101469 Acquired: 12/3/2007 17:39:34 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**105.47**	**10241.**	**107.38**	**988.85**	**1050.5**	**52.607**	**10333.**
Stddev	.57	178.	2.49	2.15	13.2	.123	175.
%RSD	.54433	1.7361	2.3181	.21733	1.2537	.23448	1.6972
#1	105.88	10115.	105.62	990.37	1059.8	52.694	10209.
#2	105.07	10367.	109.14	987.33	1041.2	52.519	10457.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**108.13**	**526.43**	**526.49**	F **520.9**	**10073.**	**10024.**	F **10420.**
Stddev	.40	.51	2.09	2.6	144.	220.	167.
%RSD	.36862	.09657	.39614	.5028	1.4324	2.1924	1.601
#1	108.41	526.79	527.97	522.8	9971.2	9868.6	10300.
#2	107.85	526.07	525.02	519.1	10175.	10179.	10540.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value				100.0			100.0
Range				20.00%			20.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1035.5**	**543.35**	**10637.**	**529.27**	**1065.4**	**99.008**	**100.83**
Stddev	7.0	1.41	186.	.38	5.8	1.569	.55
%RSD	.67867	.25976	1.7444	.07272	.54062	1.5844	.54925
#1	1040.5	544.35	10506.	529.54	1069.5	100.12	101.22
#2	1030.6	542.36	10769.	529.00	1061.4	97.899	100.44
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: BKS101469 Acquired: 12/3/2007 17:39:34 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8276.0	556.99	F 1052.2	393.31	2078.2	106.14	536.29
Stddev	34.9	.82	5.3	4.48	10.4	.11	1.59
%RSD	.42183	.14750	.50425	1.1401	.50077	.10575	.29584
#1	8300.7	557.57	1055.9	396.48	2085.6	106.06	537.41
#2	8251.3	556.41	1048.4	390.14	2070.9	106.22	535.17
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			500.00				
Range			20.000%				

Elem	Zn
Units	ppb
Avg	1036.4
Stddev	1.5
%RSD	.14372
#1	1037.5
#2	1035.4
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42180.	14142.	550790.
Stddev	215.	192.	4875.
%RSD	.50932	1.3589	.88513
#1	42028.	14278.	547340.
#2	42332.	14006.	554240.

Sample Name: S 710183-007-007-1/1 Acquired: 12/3/2007 17:43:01 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6.1091**	**36694.**	**1.2684**	**20.223**	**167.99**	**3.0595**	**4557.9**
Stddev	.4563	37.	1.6115	.620	2.22	.1407	26.5
%RSD	7.4700	.10103	127.04	3.0677	1.3224	4.5992	.58093
#1	6.4318	36720.	2.4079	20.662	169.56	3.1590	4539.2
#2	5.7864	36667.	.12896	19.784	166.42	2.9600	4576.6

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.4985**	**35.805**	**481.72**	**192.5**	**224470.**	**1401.0**	**2336.**
Stddev	.1964	.152	7.90	1.6	1106.	39.0	8.
%RSD	7.8620	.42537	1.6409	.8453	.49285	2.7841	.3397
#1	-2.3596	35.698	487.31	193.6	223690.	1373.4	2330.
#2	-2.6374	35.913	476.13	191.3	225250.	1428.6	2341.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3809.7**	**4.3393**	**140.06**	**120.94**	**87.537**	**.13680**	**-14.734**
Stddev	98.8	.2669	31.32	.91	.851	.78461	3.927
%RSD	2.5939	6.1498	22.359	.75221	.97268	573.56	26.652
#1	3879.6	4.1506	117.91	121.58	88.139	.69160	-11.957
#2	3739.8	4.5280	162.20	120.30	86.935	-.41801	-17.510

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**554.63**	**-18.484**	**85.025**	**-22.939**	**12090.**	**6.8449**	**590.87**
Stddev	13.72	.924	1.216	1.876	194.	1.1628	8.21
%RSD	2.4737	4.9997	1.4297	8.1795	1.6006	16.987	1.3897
#1	564.33	-19.137	85.884	-21.612	12227.	7.6671	596.68
#2	544.92	-17.830	84.165	-24.266	11953.	6.0227	585.06

Sample Name: S 710183-007-007-1/1 Acquired: 12/3/2007 17:43:01 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	180.43
Stddev	.74
%RSD	.41274
#1	180.96
#2	179.91

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43756.	14393.	566220.
Stddev	26.	70.	2283.
%RSD	.05864	.48705	.40325
#1	43737.	14442.	564610.
#2	43774.	14343.	567840.

Sample Name: SP710183-007-007-1/1 Acquired: 12/3/2007 17:46:26 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**17.041**	**50228.**	**5.8256**	**118.99**	**306.07**	^ *****	**6056.7**
Stddev	.216	864.	1.4237	.62	1.96	-----	123.4
%RSD	1.2698	1.7206	24.439	.51737	.64135	-----	2.0372
#1	17.194	49617.	4.8189	118.55	304.68	^ -----	5969.5
#2	16.888	50839.	6.8323	119.42	307.46	^ -----	6144.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7.8720**	**95.490**	**625.04**	**288.5**	**257620.**	**2748.1**	**3845.**
Stddev	.4955	.148	4.01	.5	5167.	120.8	80.
%RSD	6.2946	.15473	.64174	.1714	2.0057	4.3973	2.081
#1	8.2224	95.595	622.20	288.1	253960.	2662.6	3789.
#2	7.5216	95.386	627.87	288.8	261270.	2833.5	3902.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4464.7**	**48.902**	**1203.7**	**210.17**	**204.65**	**5.7771**	**-14.239**
Stddev	42.7	.059	3.2	.43	.28	1.2824	.261
%RSD	.95597	.11974	.26858	.20371	.13676	22.197	1.8295
#1	4434.5	48.861	1201.4	209.86	204.85	4.8703	-14.054
#2	4494.9	48.943	1206.0	210.47	204.45	6.6838	-14.423

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**719.69**	**22.856**	**215.32**	**6.0200**	**15285.**	**16.242**	**774.06**
Stddev	1.02	.140	1.20	.7410	45.	.457	5.45
%RSD	.14168	.61279	.55700	12.309	.29591	2.8110	.70343
#1	718.97	22.757	214.47	5.4960	15253.	16.565	770.21
#2	720.41	22.955	216.16	6.5440	15317.	15.920	777.91

Sample Name: SP710183-007-007-1/1 Acquired: 12/3/2007 17:46:26 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	333.32
Stddev	1.73
%RSD	.51922
#1	334.55
#2	332.10

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43374.	14376.	560940.
Stddev	69.	308.	5192.
%RSD	.15837	2.1407	.92565
#1	43326.	14593.	564610.
#2	43423.	14158.	557260.

Sample Name: SD710183-007-007-1/1 Acquired: 12/3/2007 17:49:48 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**16.884**	**50807.**	**9.2017**	**117.89**	**303.69**	**8.3372**	**6210.9**
Stddev	.807	173.	.0858	.08	4.69	.1500	26.2
%RSD	4.7788	.34026	.93229	.07157	1.5448	1.7994	.42118
#1	17.455	50685.	9.1410	117.95	307.01	8.4433	6192.4
#2	16.314	50930.	9.2623	117.83	300.38	8.2311	6229.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7.0629**	**90.148**	**612.45**	**280.1**	**260560.**	**2814.5**	**4014.**
Stddev	.0332	.098	9.58	.9	1967.	34.3	29.
%RSD	.47021	.10909	1.5639	.3385	.75493	1.2183	.7214
#1	7.0394	90.217	619.22	280.8	259170.	2838.8	3994.
#2	7.0863	90.078	605.68	279.5	261950.	2790.3	4035.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4295.6**	**49.171**	**1284.3**	**203.49**	**193.20**	**4.1145**	**-8.2180**
Stddev	116.7	.207	27.4	1.28	.62	.0677	1.7496
%RSD	2.7160	.42139	2.1338	.63088	.32034	1.6453	21.290
#1	4378.1	49.317	1303.7	204.40	193.64	4.0666	-6.9809
#2	4213.1	49.024	1265.0	202.58	192.77	4.1624	-9.4552

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**769.40**	**24.417**	**217.19**	**10.725**	**15486.**	**16.502**	**759.08**
Stddev	12.26	.425	3.51	.224	260.	1.676	12.83
%RSD	1.5941	1.7408	1.6160	2.0927	1.6819	10.157	1.6905
#1	778.07	24.116	219.67	10.566	15670.	15.317	768.16
#2	760.73	24.717	214.71	10.884	15302.	17.687	750.01

Sample Name: SD710183-007-007-1/1 Acquired: 12/3/2007 17:49:48 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	**319.51**
Stddev	1.91
%RSD	.59789
#1	320.86
#2	318.16

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43354.	14274.	555110.
Stddev	7.	152.	129.
%RSD	.01549	1.0675	.02333
#1	43358.	14382.	555010.
#2	43349.	14167.	555200.

Sample Name: PS710183-007-007-1/1 Acquired: 12/3/2007 17:53:12 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**53.661**	**37985.**	**94.298**	**95.171**	**189.01**	**13.440**	**10800.**
Stddev	1.807	568.	2.473	1.623	5.95	.500	131.
%RSD	3.3681	1.4953	2.6225	1.7054	3.1494	3.7216	1.2099
#1	54.939	38387.	96.047	96.319	193.22	13.793	10892.
#2	52.383	37584.	92.550	94.023	184.80	13.086	10708.

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.656**	**64.366**	**483.95**	**207.4**	**231140.**	**7552.6**	**8599.**
Stddev	.010	.195	15.05	2.1	2742.	75.6	115.
%RSD	.05319	.30315	3.1103	.9989	1.1865	1.0013	1.333
#1	18.649	64.228	494.59	208.9	233080.	7606.1	8680.
#2	18.663	64.504	473.30	205.9	229200.	7499.1	8518.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3887.0**	**36.828**	**6721.2**	**158.19**	**168.29**	**90.615**	**66.620**
Stddev	182.4	.807	28.5	2.32	.74	2.215	2.789
%RSD	4.6915	2.1911	.42392	1.4642	.44172	2.4442	4.1863
#1	4015.9	37.399	6741.3	159.83	168.82	92.181	68.592
#2	3758.0	36.258	6701.0	156.55	167.76	89.049	64.648

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6065.6**	**93.202**	**106.07**	**514.73**	**11825.**	**116.36**	**594.28**
Stddev	192.1	.721	3.20	5.79	507.	.03	17.55
%RSD	3.1678	.77393	3.0214	1.1240	4.2861	.02652	2.9530
#1	6201.5	93.712	108.33	518.82	12183.	116.34	606.69
#2	5929.8	92.692	103.80	510.64	11466.	116.38	581.87

Sample Name: PS710183-007-007-1/1 Acquired: 12/3/2007 17:53:12 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	251.64
Stddev	2.28
%RSD	.90621
#1	253.26
#2	250.03

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43753.	14334.	561680.
Stddev	103.	76.	3131.
%RSD	.23570	.52795	.55740
#1	43680.	14387.	559460.
#2	43826.	14280.	563890.

Sample Name: SE710183-007-007-1/1 Acquired: 12/3/2007 17:56:34 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.3408**	**6911.9**	**-1.4498**	**-2.8634**	**35.116**	**.49060**	**881.08**	**-.32317**
Stddev	.1473	203.2	1.8451	.3461	.055	.00888	18.19	.01128
%RSD	10.985	2.9403	127.27	12.087	.15684	1.8110	2.0644	3.4903
#1	1.2366	6768.2	-.14511	-3.1081	35.077	.49688	868.22	-.33114
#2	1.4449	7055.7	-2.7544	-2.6187	35.155	.48432	893.94	-.31519

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7.7433**	**96.797**	**38.76**	**45138.**	**274.75**	**447.9**	**793.45**	**.80296**
Stddev	.2354	.107	.74	1331.	5.99	13.4	.46	.09101
%RSD	3.0398	.11003	1.913	2.9477	2.1812	2.985	.05853	11.334
#1	7.5768	96.721	38.23	44197.	270.51	438.4	793.12	.86731
#2	7.9097	96.872	39.28	46079.	278.99	457.3	793.78	.73861

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**64.710**	**24.923**	**17.720**	**-2.1616**	**-3.4307**	**112.18**	**-4.1366**	**17.310**
Stddev	9.628	.230	.429	1.1709	1.0987	.09	.2643	.021
%RSD	14.879	.92205	2.4211	54.167	32.026	.08394	6.3883	.12300
#1	71.519	24.760	17.416	-2.9895	-4.2077	112.11	-3.9497	17.295
#2	57.902	25.085	18.023	-1.3337	-2.6538	112.25	-4.3234	17.325

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-7.3015**	**2482.2**	**.28202**	**121.01**	**37.025**
Stddev	.5643	.1	.00779	.50	.094
%RSD	7.7282	.00601	2.7610	.41060	.25328
#1	-7.7005	2482.3	.28753	120.66	37.092
#2	-6.9025	2482.1	.27651	121.36	36.959

Sample Name: SE710183-007-007-1/1 Acquired: 12/3/2007 17:56:34 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	44298.	14842.	572010.
Stddev	24.	404.	236.
%RSD	.05402	2.7253	.04120
#1	44314.	15128.	572180.
#2	44281.	14556.	571840.

Sample Name: S 710183-008-008-1/1 Acquired: 12/3/2007 17:59:48 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.55280	43174.	-8.5370	4.7187	91.130	3.2012	6026.4
Stddev	.12458	1510.	2.2430	.2823	1.010	.1071	202.5
%RSD	22.535	3.4968	26.274	5.9822	1.1079	3.3441	3.3605
#1	-.46471	42107.	-10.123	4.9183	91.844	3.2769	5883.2
#2	-.64089	44242.	-6.9510	4.5190	90.416	3.1255	6169.6

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.0323	26.086	504.27	148.5	255200.	506.94	1776.
Stddev	.2379	.128	3.44	.2	7974.	8.13	61.
%RSD	11.708	.49192	.68224	.1331	3.1247	1.6040	3.406
#1	-1.8641	25.995	506.71	148.3	249560.	501.19	1734.
#2	-2.2006	26.177	501.84	148.6	260830.	512.69	1819.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1107.9	4.2450	158.02	105.71	52.837	1.5834	-12.945
Stddev	9.6	.0089	14.34	.41	2.574	1.1450	2.370
%RSD	.86299	.21012	9.0784	.39149	4.8711	72.314	18.305
#1	1114.7	4.2513	168.16	105.42	54.657	.77377	-14.621
#2	1101.2	4.2387	147.87	106.00	51.017	2.3931	-11.270

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1033.0	-19.261	151.71	-32.556	12503.	3.4088	641.87
Stddev	13.3	.455	1.34	1.621	83.	1.2845	5.96
%RSD	1.2903	2.3635	.88544	4.9776	.66249	37.682	.92829
#1	1042.5	-18.939	152.66	-33.702	12561.	4.3170	646.08
#2	1023.6	-19.583	150.76	-31.410	12444.	2.5005	637.66

Sample Name: S 710183-008-008-1/1 Acquired: 12/3/2007 17:59:48 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	**150.23**
Stddev	.29
%RSD	.19017
#1	150.44
#2	150.03

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43404.	14660.	568330.
Stddev	14.	405.	3655.
%RSD	.03254	2.7632	.64318
#1	43394.	14947.	565750.
#2	43414.	14374.	570920.

Sample Name: S 710183-009-009-1/1 Acquired: 12/3/2007 18:03:06 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.5736**	**34415.**	**-3.7019**	**2.0703**	**73.216**	**3.3383**	**1899.0**
Stddev	.2164	9.	2.1418	.2620	.105	.1269	1.8
%RSD	13.754	.02590	57.858	12.653	.14400	3.8006	.09456
#1	-1.7267	34409.	-2.1873	2.2555	73.291	3.2486	1897.8
#2	-1.4206	34421.	-5.2164	1.8850	73.142	3.4280	1900.3

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.6836**	**17.510**	**588.98**	**143.1**	**291630.**	**559.85**	**1681.**
Stddev	.0254	.002	1.44	2.6	347.	44.54	.
%RSD	.94517	.00909	.24394	1.786	.11884	7.9547	.0267
#1	-2.6657	17.512	587.96	141.3	291870.	528.36	1681.
#2	-2.7016	17.509	589.99	144.9	291380.	591.34	1680.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**723.88**	**5.3874**	**82.668**	**96.156**	**58.705**	**-.96863**	**-10.901**
Stddev	1.29	.3786	3.797	.624	1.360	2.7119	1.331
%RSD	.17773	7.0278	4.5924	.64903	2.3162	279.97	12.210
#1	722.97	5.6552	85.352	95.715	59.667	.94894	-9.9602
#2	724.79	5.1197	79.983	96.598	57.744	-2.8862	-11.843

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**630.36**	**-18.283**	**99.055**	**-29.349**	**12636.**	**3.3955**	**690.98**
Stddev	.20	.742	.005	2.277	75.	1.2499	.81
%RSD	.03232	4.0574	.00543	7.7582	.59094	36.810	.11722
#1	630.50	-18.807	99.051	-30.959	12583.	2.5117	690.40
#2	630.21	-17.758	99.059	-27.739	12688.	4.2793	691.55

Sample Name: S 710183-009-009-1/1 Acquired: 12/3/2007 18:03:06 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	143.70
Stddev	.20
%RSD	.13751
#1	143.84
#2	143.56

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43178.	14232.	562960.
Stddev	104.	25.	101.
%RSD	.24103	.17413	.01796
#1	43105.	14249.	562890.
#2	43252.	14214.	563030.

Sample Name: ICSA Acquired: 12/3/2007 18:06:25 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F -3.0275	505100.	-19.786	3.0152	-1.3335	-.04285
Stddev	.1227	25236.	2.294	1.7470	.0801	.01461
%RSD	4.0511	4.9964	11.592	57.938	6.0094	34.088
#1	-3.1142	487250.	-21.408	1.7800	-1.2768	-.03252
#2	-2.9408	522940.	-18.165	4.2505	-1.3901	-.05317
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	3.0000					
Low Limit	-3.0000					

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	476460.	-1.1034	2.8158	3.2882	F -17.61	185560.
Stddev	23385.	.4377	.3507	.1231	11.59	9087.
%RSD	4.9081	39.666	12.454	3.7449	65.82	4.8968
#1	459920.	-.79394	2.5679	3.2011	-25.80	179140.
#2	492990.	-1.4129	3.0638	3.3753	-9.412	191990.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit					3.000	
Low Limit					-3.000	

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-87.901	F 466400.	4.6931	-.41397	119.34	1.9619
Stddev	34.760	38290.	.7409	.05224	6.03	.3146
%RSD	39.544	8.210	15.787	12.619	5.0510	16.034
#1	-63.323	439300.	5.2170	-.37703	123.60	1.7394
#2	-112.48	493500.	4.1692	-.45090	115.07	2.1843
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		3.000				
Low Limit		-3.000				

Sample Name: ICSA Acquired: 12/3/2007 18:06:25 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.5538	.16015	-15.104	-10.506	.36623	F 6.5581
Stddev	7.7709	1.7726	.029	.062	.83682	.0024
%RSD	139.92	1106.8	.19100	.58561	228.50	.03694
#1	11.049	1.4136	-15.124	-10.462	.95795	6.5564
#2	.05896	-1.0933	-15.083	-10.549	-.22549	6.5598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						5.0000
Low Limit						-5.0000

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-19.501	15.151	-3.7650	-.53817	-11.672
Stddev	2.102	.061	1.4304	.06769	2.025
%RSD	10.776	.40350	37.993	12.578	17.350
#1	-20.987	15.195	-2.7535	-.49031	-10.240
#2	-18.015	15.108	-4.7764	-.58604	-13.104
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	40407.	14108.	526770.
Stddev	118.	634.	345.
%RSD	.29156	4.4956	.06558
#1	40323.	14556.	527020.
#2	40490.	13659.	526530.

Sample Name: ICSAB Acquired: 12/3/2007 18:09:39 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**210.85**	**514510.**	**92.573**	**1027.7**	**507.93**	**488.19**
Stddev	1.71	18063.	3.561	3.9	5.80	.04
%RSD	.80866	3.5107	3.8463	.38111	1.1414	.00770
#1	212.05	501740.	90.056	1024.9	512.03	488.22
#2	209.64	527280.	95.091	1030.5	503.83	488.17
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**482580.**	**981.16**	**480.95**	**482.51**	F **458.7**	**187740.**
Stddev	15821.	1.84	.35	3.13	4.5	6151.
%RSD	3.2783	.18704	.07314	.64850	.9839	3.2760
#1	471390.	979.86	480.70	484.72	455.5	183390.
#2	493770.	982.46	481.20	480.29	461.9	192090.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value					200.0	
Range					20.00%	

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5260.2**	F **469300.**	**489.14**	**1030.6**	**11113.**	**946.86**
Stddev	120.8	20340.	4.56	3.1	311.	2.45
%RSD	2.2958	4.334	.93195	.30420	2.7970	.25857
#1	5174.8	454900.	492.36	1028.3	10893.	945.13
#2	5345.6	483700.	485.91	1032.8	11333.	948.59
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		200.0				
Range		20.00%				

Sample Name: ICSAB Acquired: 12/3/2007 18:09:39 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**53.874**	**623.07**	F **37.867**	F **1237.3**	**999.60**	**510.76**
Stddev	8.799	2.89	.527	10.2	1.43	4.07
%RSD	16.333	.46433	1.3907	.82696	.14278	.79649
#1	60.096	621.02	37.495	1244.6	998.59	513.64
#2	47.652	625.11	38.240	1230.1	1000.6	507.89
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value			50.000	1000.0		
Range			-20.000%	20.000%		

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	**187.53**	**996.90**	**95.024**	**500.00**	**1013.9**
Stddev	4.02	7.94	1.661	3.32	.2
%RSD	2.1437	.79658	1.7480	.66341	.02170
#1	184.69	1002.5	96.199	502.35	1013.7
#2	190.37	991.29	93.850	497.66	1014.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	40178.	13955.	524570.
Stddev	60.	363.	2470.
%RSD	.15024	2.6022	.47084
#1	40135.	14212.	522820.
#2	40220.	13698.	526320.

Sample Name: CCV Acquired: 12/3/2007 18:13:14 . Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	528.02	51878.	541.05	523.20	508.34	52.196	101890.
Stddev	1.28	1373.	2.02	.41	5.26	.118	2510.
%RSD	.24165	2.6463	.37300	.07811	1.0354	.22574	2.4632
#1	528.92	50907.	542.48	523.49	512.07	52.279	100120.
#2	527.12	52849.	539.62	522.91	504.62	52.113	103670.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	524.82	515.21	507.11	522.4	49850.	25284.	F 99920.
Stddev	.39	.17	1.14	2.0	1206.	451.	2897.
%RSD	.07435	.03207	.22394	.3822	2.4201	1.7856	2.899
#1	525.10	515.33	507.91	521.0	48997.	24964.	97870.
#2	524.54	515.09	506.30	523.8	50703.	25603.	102000.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							500.0
Range							10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	502.95	536.39	104310.	508.00	523.69	532.46	533.74
Stddev	1.02	.10	2157.	.14	1.67	.61	2.45
%RSD	.20307	.01928	2.0682	.02724	.31921	.11399	.45951
#1	503.68	536.32	102780.	508.10	524.87	532.03	535.47
#2	502.23	536.46	105830.	507.90	522.50	532.89	532.00
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 12/3/2007 18:13:14 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	532.98	526.84	509.79	528.02	519.56	529.73	521.01
Stddev	1.91	.45	4.92	.82	1.03	1.86	1.02
%RSD	.35832	.08459	.96515	.15473	.19795	.35086	.19549
#1	534.33	526.53	506.31	528.60	520.28	531.05	521.73
#2	531.63	527.16	513.27	527.44	518.83	528.42	520.29
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Zn
Units	ppb
Avg	521.61
Stddev	.64
%RSD	.12176
#1	522.06
#2	521.17
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42360.	14055.	548560.
Stddev	8.	193.	1192.
%RSD	.01858	1.3709	.21736
#1	42354.	14192.	547710.
#2	42366.	13919.	549400.

Sample Name: CCB Acquired: 12/3/2007 18:16:43 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.46415	31.498	.16714	-10.398	.01064	.02614	57.888	.03577
Stddev	.09868	51.553	1.3605	.009	.00766	.00373	8.318	.04737
%RSD	21.259	163.67	813.97	.08294	71.961	14.253	14.369	132.42
#1	.53393	67.951	-.79487	-10.404	.00523	.02877	52.007	.00228
#2	.39438	-4.9554	1.1292	-10.392	.01606	.02350	63.770	.06927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.00139	-.17387	.5995	30.959	-7.2611	F 47.81	.12226	.82696
Stddev	.16034	.12394	2.037	5.005	14.227	2.60	.00769	.02886
%RSD	11528.	71.281	339.7	16.167	195.94	5.428	6.2858	3.4903
#1	.11198	-.08623	-.8407	34.498	2.7991	49.64	.12770	.80656
#2	-.11477	-.26150	2.040	27.420	-17.321	45.97	.11683	.84737
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	67.599	-.15419	.94071	-.58266	-.47386	-.17002	-.15117	.06007
Stddev	5.953	.37141	.66034	.36538	2.8077	.11163	.06356	.00167
%RSD	8.8062	240.87	70.196	62.709	592.52	65.655	42.047	2.7849
#1	63.390	.10843	.47378	-.84102	-2.4592	-.24895	-.10623	.06125
#2	71.809	-.41682	1.4076	-.32430	1.5115	-.09109	-.19612	.05889
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 18:16:43 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.4942	.58552	.08417	-.03489	.16784
Stddev	.1558	.01765	.59526	.06574	.03591
%RSD	6.2479	3.0139	707.22	188.42	21.398
#1	-2.6044	.59800	-.33675	-.08138	.19323
#2	-2.3841	.57305	.50508	.01159	.14244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	44009.	14409.	564350.
Stddev	92.	404.	400.
%RSD	.20950	2.8040	.07089
#1	43943.	14694.	564630.
#2	44074.	14123.	564060.

Sample Name: S 710183-010-010-1/1 Acquired: 12/3/2007 18:20:02 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.8441**	**47083.**	**1.9262**	**7.6823**	**116.38**	**2.6272**	**2703.7**
Stddev	.1675	978.	1.1920	.5904	.53	.0039	69.0
%RSD	9.0844	2.0771	61.883	7.6849	.45712	.15009	2.5520
#1	1.9626	47774.	2.7691	8.0997	116.00	2.6244	2752.5
#2	1.7256	46391.	1.0833	7.2648	116.75	2.6300	2655.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.9554**	**31.606**	**449.02**	**169.6**	**203540.**	**1336.4**	**2317.**
Stddev	.1744	.142	3.60	.7	4061.	73.2	56.
%RSD	8.9203	.45033	.80083	.4120	1.9954	5.4809	2.433
#1	-2.0788	31.505	446.48	170.1	206410.	1284.6	2357.
#2	-1.8321	31.706	451.56	169.1	200670.	1388.2	2277.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2066.5**	**4.0284**	**129.87**	**111.64**	**86.383**	**.02254**	**-12.468**
Stddev	10.6	.4355	1.04	.28	1.132	.83491	1.245
%RSD	.51248	10.812	.80311	.25346	1.3104	3704.3	9.9861
#1	2059.0	4.3364	130.61	111.84	85.583	-.56783	-11.587
#2	2074.0	3.7204	129.13	111.44	87.184	.61291	-13.348

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**572.21**	**-16.193**	**158.37**	**-21.445**	**10528.**	**3.2203**	**523.60**
Stddev	9.28	.677	.74	.785	37.	1.3473	3.83
%RSD	1.6218	4.1834	.46624	3.6585	.35035	41.838	.73172
#1	565.65	-15.714	157.85	-20.891	10502.	2.2676	520.89
#2	578.77	-16.672	158.89	-22.000	10554.	4.1729	526.31

Sample Name: S 710183-010-010-1/1 Acquired: 12/3/2007 18:20:02 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	190.58
Stddev	.40
%RSD	.20741
#1	190.30
#2	190.86

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43317.	13819.	561480.
Stddev	4.	283.	2148.
%RSD	.00975	2.0456	.38262
#1	43314.	13619.	563000.
#2	43320.	14018.	559960.

Sample Name: S 710183-011-011-1/1 Acquired: 12/3/2007 18:23:21 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**75.876**	**42790.**	**-8.6009**	**-.18862**	**25.372**	**2.4006**	**1961.6**
Stddev	1.268	781.	.1357	.68829	.349	.0389	16.9
%RSD	1.6706	1.8260	1.5783	364.91	1.3756	1.6218	.86246
#1	76.772	43342.	-8.5049	.29807	25.619	2.4281	1973.6
#2	74.980	42238.	-8.6969	-.67531	25.125	2.3731	1949.7

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**17.253**	**11.546**	**533.51**	**185.3**	**236710.**	**806.85**	**1864.**
Stddev	.164	.467	7.42	1.0	4045.	64.64	30.
%RSD	.94867	4.0468	1.3907	.5296	1.7087	8.0109	1.592
#1	17.137	11.216	538.75	186.0	239570.	852.55	1885.
#2	17.369	11.877	528.26	184.6	233850.	761.14	1843.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**540.81**	**4.0381**	**111.01**	**104.50**	**110.35**	**1.6994**	**-4.9368**
Stddev	7.85	.1522	8.53	.16	.77	1.9920	2.6028
%RSD	1.4525	3.7698	7.6816	.14922	.69340	117.22	52.724
#1	546.36	3.9304	117.04	104.61	109.81	.29079	-3.0963
#2	535.26	4.1457	104.98	104.39	110.89	3.1080	-6.7773

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**619.84**	**-16.192**	**43.095**	**-24.877**	**10062.**	**4.2459**	**489.48**
Stddev	8.40	.976	.596	.418	205.	2.4786	7.49
%RSD	1.3552	6.0252	1.3820	1.6795	2.0396	58.375	1.5311
#1	625.78	-16.882	43.516	-25.173	10207.	5.9985	494.78
#2	613.90	-15.503	42.674	-24.582	9917.0	2.4933	484.19

Sample Name: S 710183-011-011-1/1 Acquired: 12/3/2007 18:23:21 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	103.96
Stddev	.14
%RSD	.13468
#1	104.06
#2	103.86

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43102.	13798.	554890.
Stddev	60.	68.	5109.
%RSD	.13942	.48996	.92071
#1	43144.	13750.	551280.
#2	43059.	13846.	558500.

Sample Name: S 710183-012-012-1/1 Acquired: 12/3/2007 18:26:40 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.1343**	**35660.**	**-5.3586**	**1.3804**	**37.674**	**2.7454**	**2327.7**
Stddev	.0693	471.	.0529	.4332	.111	.1037	39.1
%RSD	6.1073	1.3196	.98678	31.378	.29398	3.7764	1.6800
#1	-1.1833	35993.	-5.3959	1.6867	37.752	2.8187	2355.4
#2	-1.0853	35328.	-5.3212	1.0741	37.596	2.6721	2300.1

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.2439**	**14.455**	**582.33**	**124.4**	**229070.**	**961.36**	**1917.**
Stddev	.2034	.056	.07	2.6	3662.	54.71	27.
%RSD	9.0636	.38813	.01129	2.074	1.5987	5.6904	1.421
#1	-2.3877	14.495	582.38	122.6	231660.	922.67	1936.
#2	-2.1001	14.415	582.29	126.2	226490.	1000.0	1898.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**725.03**	**3.8452**	**116.77**	**91.784**	**27.410**	**1.7943**	**-7.4526**
Stddev	1.27	.2504	6.64	.163	.150	1.0091	.0199
%RSD	.17452	6.5112	5.6854	.17719	.54793	56.239	.26658
#1	725.92	3.6682	112.07	91.899	27.517	1.0807	-7.4386
#2	724.13	4.0223	121.46	91.669	27.304	2.5078	-7.4667

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**628.96**	**-18.433**	**44.245**	**-26.497**	**11354.**	**2.7298**	**568.14**
Stddev	1.34	.462	.046	2.253	123.	.2814	.81
%RSD	.21368	2.5042	.10332	8.5014	1.0861	10.307	.14278
#1	629.91	-18.106	44.277	-24.904	11441.	2.9288	568.72
#2	628.01	-18.759	44.213	-28.090	11266.	2.5309	567.57

Sample Name: S 710183-012-012-1/1 Acquired: 12/3/2007 18:26:40 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	101.87
Stddev	.50
%RSD	.49116
#1	101.52
#2	102.23

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43135.	13746.	557180.
Stddev	92.	163.	1238.
%RSD	.21301	1.1863	.22213
#1	43070.	13631.	556310.
#2	43200.	13861.	558060.

Sample Name: S 710183-013-013-1/1 Acquired: 12/3/2007 18:29:59 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.4447**	**28631.**	**-1.6657**	**9.5442**	**72.115**	**3.3925**	**1875.4**
Stddev	.3199	307.	.5715	.5448	.585	.0128	46.9
%RSD	22.143	1.0727	34.307	5.7082	.81189	.37774	2.5002
#1	1.2185	28848.	-1.2616	9.9295	72.529	3.3834	1908.5
#2	1.6709	28414.	-2.0698	9.1590	71.701	3.4015	1842.2

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.0614**	**29.589**	**561.14**	**213.1**	**221620.**	**1035.6**	**2248.**
Stddev	.3053	.126	5.65	.9	3864.	48.1	34.
%RSD	14.808	.42499	1.0076	.4378	1.7437	4.6413	1.494
#1	-2.2773	29.500	565.14	213.8	224360.	1069.6	2272.
#2	-1.8456	29.678	557.14	212.5	218890.	1001.6	2224.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2026.9**	**3.7167**	**108.20**	**126.51**	**141.26**	**2.3161**	**-12.662**
Stddev	19.1	.1835	21.33	.82	2.32	.4353	.840
%RSD	.94349	4.9384	19.712	.64944	1.6397	18.795	6.6333
#1	2040.5	3.5869	93.116	127.09	142.90	2.6239	-12.068
#2	2013.4	3.8465	123.28	125.93	139.63	2.0082	-13.256

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**581.68**	**-12.402**	**39.451**	**-28.435**	**13896.**	**3.6934**	**627.07**
Stddev	17.17	.032	.421	3.157	43.	.7205	6.25
%RSD	2.9517	.25519	1.0678	11.103	.30903	19.509	.99683
#1	593.82	-12.425	39.749	-26.202	13926.	4.2029	631.49
#2	569.54	-12.380	39.153	-30.667	13865.	3.1839	622.65

Sample Name: S 710183-013-013-1/1 Acquired: 12/3/2007 18:29:59 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	205.10
Stddev	.08
%RSD	.04033
#1	205.16
#2	205.05

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43650.	14034.	561570.
Stddev	142.	214.	3237.
%RSD	.32633	1.5231	.57642
#1	43549.	13883.	559280.
#2	43750.	14185.	563860.

Sample Name: S 710183-014-014-1/1 Acquired: 12/3/2007 18:33:18 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.7434	46740.	3.6120	20.629	107.25	2.6158	2916.2
Stddev	.3902	1495.	2.6666	.681	.38	.0455	93.8
%RSD	5.0389	3.1979	73.828	3.2990	.35768	1.7393	3.2161
#1	7.4675	45683.	1.7264	21.110	106.97	2.6480	2849.9
#2	8.0193	47797.	5.4976	20.148	107.52	2.5837	2982.5

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5551	40.200	464.11	167.1	200250.	1256.8	1926.
Stddev	.5475	.177	1.34	1.1	6580.	10.3	60.
%RSD	35.204	.44144	.28871	.6608	3.2858	.82092	3.129
#1	-1.1680	40.325	463.16	167.9	195600.	1264.1	1883.
#2	-1.9422	40.074	465.06	166.3	204910.	1249.5	1969.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4510.4	3.5572	216.89	149.43	128.79	1.4577	-15.682
Stddev	27.3	.1560	9.87	.52	.03	1.6709	3.258
%RSD	.60456	4.3844	4.5523	.35034	.02292	114.63	20.777
#1	4491.2	3.4469	209.91	149.80	128.77	.27619	-17.985
#2	4529.7	3.6675	223.87	149.06	128.81	2.6392	-13.378

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	631.44	-17.836	54.867	-25.015	10936.	2.5479	496.79
Stddev	.18	.175	.176	1.136	22.	1.4719	1.76
%RSD	.02918	.97897	.32164	4.5427	.19809	57.767	.35464
#1	631.57	-17.713	54.742	-25.818	10952.	3.5887	495.54
#2	631.31	-17.960	54.992	-24.211	10921.	1.5072	498.03

Sample Name: S 710183-014-014-1/1 Acquired: 12/3/2007 18:33:18 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	134.43
Stddev	1.35
%RSD	1.0077
#1	135.39
#2	133.48

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43660.	14571.	567570.
Stddev	22.	383.	4425.
%RSD	.05090	2.6287	.77956
#1	43676.	14842.	570700.
#2	43645.	14300.	564440.

Sample Name: S 710183-015-015-1/1 Acquired: 12/3/2007 18:36:43 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.35729**	**29680.**	**-6.7562**	**6.9806**	**80.189**	**3.9085**	**3040.2**
Stddev	.13995	1341.	1.1895	.5888	1.234	.1700	138.9
%RSD	39.171	4.5170	17.606	8.4355	1.5387	4.3500	4.5684
#1	.25833	28732.	-5.9151	6.5642	81.061	4.0288	2941.9
#2	.45625	30628.	-7.5973	7.3970	79.316	3.7883	3138.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.9508**	**26.676**	**579.00**	**163.6**	**252180.**	**1020.3**	**2498.**
Stddev	.7396	.674	11.04	.7	12829.	42.0	124.
%RSD	37.911	2.5256	1.9061	.4571	5.0872	4.1183	4.964
#1	-1.4278	26.200	586.80	164.2	243110.	990.56	2411.
#2	-2.4738	27.152	571.20	163.1	261250.	1050.0	2586.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1462.5**	**4.4617**	**102.73**	**122.51**	**80.399**	**1.5603**	**-11.748**
Stddev	25.1	.1841	33.97	.33	1.132	.0467	2.256
%RSD	1.7171	4.1257	33.069	.26759	1.4082	2.9952	19.201
#1	1480.2	4.3316	126.75	122.28	79.598	1.5273	-13.343
#2	1444.7	4.5919	78.705	122.74	81.199	1.5934	-10.153

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**544.16**	**-25.416**	**62.259**	**-31.743**	**15074.**	**1.9808**	**689.87**
Stddev	11.62	.113	1.098	.840	279.	.0600	13.18
%RSD	2.1351	.44581	1.7630	2.6476	1.8512	3.0274	1.9106
#1	552.37	-25.336	63.035	-32.337	15272.	2.0232	699.19
#2	535.94	-25.496	61.483	-31.149	14877.	1.9384	680.55

Sample Name: S 710183-015-015-1/1 Acquired: 12/3/2007 18:36:43 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	222.32
Stddev	1.80
%RSD	.80758
#1	223.59
#2	221.06

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43238.	14139.	559380.
Stddev	.	621.	9817.
%RSD	.00110	4.3954	1.7549
#1	43239.	14578.	552440.
#2	43238.	13699.	566320.

Sample Name: S 710183-016-016-1/1 Acquired: 12/3/2007 18:40:02 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.6682**	**20228.**	**-5.3156**	**.89562**	**34.977**	**3.8889**	**1644.3**
Stddev	.5326	1103.	3.2682	.13427	.316	.1171	93.6
%RSD	31.926	5.4516	61.483	14.992	.90412	3.0117	5.6934
#1	-2.0448	19448.	-7.6265	.80068	35.201	3.9717	1578.1
#2	-1.2916	21008.	-3.0046	.99056	34.754	3.8061	1710.5

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.8879**	**22.091**	**543.24**	**149.7**	**232430.**	**679.54**	**1741.**
Stddev	.7006	.210	1.41	3.7	12026.	20.67	94.
%RSD	37.108	.94885	.26018	2.496	5.1742	3.0414	5.396
#1	-1.3926	21.942	544.24	152.3	223920.	694.15	1674.
#2	-2.3833	22.239	542.24	147.0	240930.	664.92	1807.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**734.28**	**3.6591**	**62.332**	**91.909**	**437.78**	**2.0652**	**-13.810**
Stddev	3.55	.0324	24.756	.015	4.75	1.9727	2.217
%RSD	.48375	.88665	39.716	.01586	1.0856	95.520	16.051
#1	736.79	3.6362	79.838	91.919	441.14	.67029	-12.243
#2	731.77	3.6820	44.827	91.899	434.42	3.4601	-15.377

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**562.80**	**-23.429**	**35.231**	**-28.674**	**14736.**	**3.0816**	**700.39**
Stddev	3.09	.913	.321	.996	77.	.9655	4.16
%RSD	.54837	3.8978	.91030	3.4736	.52504	31.332	.59450
#1	564.98	-22.783	35.458	-29.378	14791.	2.3989	703.33
#2	560.62	-24.074	35.004	-27.970	14681.	3.7643	697.44

Sample Name: S 710183-016-016-1/1 Acquired: 12/3/2007 18:40:02 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	158.02
Stddev	2.45
%RSD	1.5495
#1	159.75
#2	156.29

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42933.	14148.	557030.
Stddev	59.	662.	1888.
%RSD	.13791	4.6760	.33891
#1	42975.	14616.	555700.
#2	42891.	13680.	558370.

Sample Name: S 710183-017-017-1/1 Acquired: 12/3/2007 18:43:22 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6.1130**	**26678.**	**-2.0281**	**9.7103**	**83.654**	**3.4026**	**1121.6**
Stddev	.0190	2757.	1.2240	.0704	.639	.0461	97.0
%RSD	.30997	10.336	60.351	.72514	.76348	1.3562	8.6485
#1	6.0996	28628.	-1.1626	9.6605	83.203	3.3700	1190.2
#2	6.1264	24728.	-2.8937	9.7601	84.106	3.4352	1053.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.0052**	**43.556**	**555.13**	**202.9**	**236380.**	**477.98**	**2344.**
Stddev	1.2989	.154	4.72	.7	24740.	84.43	240.
%RSD	129.21	.35336	.84996	.3536	10.466	17.665	10.22
#1	-1.9237	43.664	551.80	202.3	253880.	418.27	2514.
#2	-.08677	43.447	558.47	203.4	218890.	537.68	2175.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2756.2**	**3.5659**	**87.043**	**126.64**	**50.125**	**.77885**	**-15.036**
Stddev	22.8	.1659	.808	1.58	2.389	.41805	10.425
%RSD	.82609	4.6532	.92880	1.2515	4.7657	53.676	69.333
#1	2740.1	3.6832	86.471	127.76	48.436	.48324	-7.6643
#2	2772.3	3.4486	87.614	125.52	51.814	1.0745	-22.407

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**488.52**	**-22.745**	**30.578**	**-28.670**	**13618.**	**3.1804**	**647.29**
Stddev	.57	.473	.259	4.671	37.	1.3929	5.93
%RSD	.11613	2.0814	.84821	16.293	.26927	43.796	.91639
#1	488.92	-23.080	30.395	-25.367	13592.	4.1653	643.10
#2	488.12	-22.411	30.761	-31.974	13644.	2.1955	651.48

Sample Name: S 710183-017-017-1/1 Acquired: 12/3/2007 18:43:22 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	175.91
Stddev	2.79
%RSD	1.5864
#1	173.94
#2	177.89

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42874.	14228.	561870.
Stddev	127.	1169.	6308.
%RSD	.29505	8.2181	1.1227
#1	42784.	13401.	566330.
#2	42963.	15054.	557410.

Sample Name: S 710183-018-018-1/1 Acquired: 12/3/2007 18:46:42 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:.

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.2730	27258.	-3.4302	1.6928	30.950	2.9981	1785.1
Stddev	.1900	64.	1.5115	.1388	.272	.0862	.4
%RSD	14.921	.23564	44.064	8.1970	.87881	2.8753	.02133
#1	-1.4073	27304.	-4.4989	1.5946	31.142	3.0590	1785.3
#2	-1.1387	27213.	-2.3614	1.7909	30.758	2.9371	1784.8

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.3007	16.147	565.04	169.5	246460.	1123.6	1966.
Stddev	.0858	.110	4.45	1.7	1179.	19.7	8.
%RSD	3.7305	.67850	.78812	1.031	.47832	1.7552	.4104
#1	-2.2400	16.070	568.18	170.7	247290.	1137.5	1971.
#2	-2.3614	16.225	561.89	168.2	245620.	1109.6	1960.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	764.77	4.6377	90.087	93.719	117.14	2.8031	-9.7732
Stddev	6.50	.4003	13.649	.666	1.66	.2040	2.4940
%RSD	.85014	8.6313	15.151	.71039	1.4199	7.2783	25.519
#1	769.37	4.3546	80.436	93.248	115.96	2.9474	-8.0097
#2	760.18	4.9207	99.738	94.189	118.31	2.6588	-11.537

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	603.34	-19.019	33.072	-29.614	12286.	-.43923	612.74
Stddev	3.49	.084	.255	1.690	174.	3.5620	5.50
%RSD	.57770	.44185	.77220	5.7078	1.4161	810.97	.89712
#1	605.80	-18.959	33.253	-30.809	12409.	2.0795	616.62
#2	600.87	-19.078	32.892	-28.419	12163.	-2.9580	608.85

Sample Name: S 710183-018-018-1/1 Acquired: 12/3/2007 18:46:42 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	123.35
Stddev	.12
%RSD	.09709
#1	123.26
#2	123.43

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42644.	13753.	556750.
Stddev	15.	39.	4724.
%RSD	.03476	.28358	.84851
#1	42654.	13725.	553410.
#2	42633.	13780.	560090.

Sample Name: S 710183-019-019-1/1 Acquired: 12/3/2007 18:50:01 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.03024**	**27856.**	**-.60439**	**1.7746**	**43.945**	**3.0127**	**1634.2**
Stddev	.33754	93.	3.1792	.2205	.223	.0888	12.0
%RSD	1116.1	.33508	526.02	12.428	.50763	2.9481	.73260
#1	.26892	27922.	-2.8524	1.6186	44.103	3.0755	1642.7
#2	-.20843	27790.	1.6436	1.9305	43.788	2.9499	1625.8

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.3542**	**21.924**	**515.07**	**131.1**	**214710.**	**965.20**	**1829.**
Stddev	.0276	.226	5.09	.9	1071.	.66	9.
%RSD	1.1708	1.0298	.98896	.6726	.49883	.06823	.4894
#1	-2.3737	22.083	518.67	130.4	215470.	965.67	1835.
#2	-2.3347	21.764	511.46	131.7	213960.	964.74	1823.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1161.3**	**3.8153**	**107.79**	**90.922**	**61.202**	**-.57894**	**-6.4949**
Stddev	6.7	.0229	24.21	.812	1.319	1.6389	1.1945
%RSD	.57823	.60096	22.460	.89273	2.1554	283.08	18.391
#1	1166.0	3.7990	90.672	91.496	62.134	-1.7378	-7.3395
#2	1156.5	3.8315	124.91	90.348	60.269	.57992	-5.6502

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**588.21**	**-19.483**	**31.266**	**-22.778**	**12459.**	**3.9820**	**571.11**
Stddev	1.83	.329	.192	1.549	62.	2.9942	3.32
%RSD	.31029	1.6905	.61400	6.8005	.49478	75.193	.58143
#1	589.50	-19.250	31.402	-23.873	12503.	6.0993	573.45
#2	586.92	-19.716	31.130	-21.683	12416.	1.8648	568.76

Sample Name: S 710183-019-019-1/1 Acquired: 12/3/2007 18:50:01 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	140.21
Stddev	1.35
%RSD	.96434
#1	141.17
#2	139.26

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42618.	13702.	549880.
Stddev	51.	113.	3606.
%RSD	.11985	.82303	.65571
#1	42654.	13622.	552430.
#2	42582.	13781.	547330.

Sample Name: CCV Acquired: 12/3/2007 18:53:20 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	kF 3.4227	kF 40841.	sF 42.515	sF -62.755	kF 2.7139	kF -.77725
Stddev	3.2029	16899.	47.983	74.550	3.6810	.17313
%RSD	93.577	41.379	112.86	118.79	135.63	22.275
#1	k 5.6875	k 52790.	s 76.444	s -115.47	k 5.3168	k -.65483
#2	1.1579	28891.	8.5866	-10.041	.11108	-.89967
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	500.00	50000.	500.00	500.00	500.00	50.000
Range	-10.000%	-10.000%	-10.000%	-10.000%	-10.000%	-10.000%

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 79671.	sF -.87346	sF 6.4441	kF 3.5306	sF -39.79	F 39029.
Stddev	33196.	1.0483	8.9971	4.3203	67.43	16225.
%RSD	41.667	120.01	139.62	122.37	169.5	41.572
#1	103140.	s -.13223	s 12.806	k 6.5855	s -87.46	50502.
#2	56198.	-1.6147	.08226	.47566	7.891	27556.
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	100000.	500.00	500.00	500.00	500.0	50000.
Range	-10.000%	-10.000%	-10.000%	-10.000%	-10.00%	-10.000%

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	kF 19951.	F 96660.	kF .93850	sF -.69157	F 82340.	sF 4.5478
Stddev	8144.	8864.	3.7634	1.3961	33350.	4.5702
%RSD	40.820	9.171	401.00	201.88	40.503	100.49
#1	k 25709.	102900.	k 3.5996	s -1.6788	105920.	s 7.7794
#2	14192.	90390.	-1.7226	.29565	58758.	1.3161
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	25000.	500.0	500.00	500.00	100000.	500.00
Range	-10.000%	10.00%	-10.000%	-10.000%	-10.000%	-10.000%

Sample Name: CCV Acquired: 12/3/2007 18:53:20 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	sF 55.246	sF -16.629	sF -34.448	F 4.7520	sF -7.1708	F 2.7959
Stddev	88.706	20.218	50.276	7.6410	9.8225	3.5904
%RSD	160.57	121.58	145.95	160.80	136.98	128.42
#1	s 117.97	s -30.926	s -69.999	10.155	s -14.116	5.3346
#2	-7.4788	-2.3325	1.1027	-.65104	-.2253	.25709
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	500.00	500.00	500.00	500.00	500.00	500.00
Range	-10.000%	-10.000%	-10.000%	-10.000%	-10.000%	-10.000%

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	sF -35.803	kF 6.2349	sF 67.728	kF 2.6074	sF -10.520
Stddev	59.788	5.1926	99.822	4.0314	4.635
%RSD	166.99	83.283	147.39	154.61	44.059
#1	s -78.079	k 9.9067	s 138.31	k 5.4581	s -13.797
#2	6.4730	2.5632	-2.8575	-.24320	-7.2424
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	500.00	500.00	500.00	500.00	500.00
Range	-10.000%	-10.000%	-10.000%	-10.000%	-10.000%

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	^ *****	14307.	503070.
Stddev	-----	995.	113180.
%RSD	-----	6.9571	22.498
#1	^ -----	13603.	423040.
#2	66761.	15011.	583100.

Sample Name: CCB Acquired: 12/3/2007 18:56:40 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23447	9.8329	.28360	-11.192	-.02452	.01596	21.353	.09255
Stddev	.37099	30.241	.58260	.446	.00348	.01163	2.591	.02288
%RSD	158.23	307.55	205.43	3.9890	14.182	72.898	12.133	24.719
#1	-.02786	31.217	-.12836	-11.507	-.02698	.02419	19.521	.07637
#2	.49679	-11.551	.69556	-10.876	-.02206	.00773	23.185	.10873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14850	-.28289	-.5275	23.117	46.188	F 13.53	.09213	.47857
Stddev	.02770	.28642	1.105	9.563	84.567	.14	.05335	.08388
%RSD	18.655	101.25	209.4	41.369	183.09	1.030	57.905	17.527
#1	.12891	-.08036	.2537	29.879	-13.610	13.63	.05441	.53788
#2	.16809	-.48542	-1.309	16.355	105.99	13.43	.12985	.41926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18.006	-.40281	.68072	-.33731	-2.3682	-.64406	-.45812	.02914
Stddev	20.718	.11097	.26683	.60007	1.8979	.39972	.33044	.01435
%RSD	115.06	27.550	39.198	177.90	80.141	62.063	72.128	49.235
#1	32.655	-.48128	.86940	-.76162	-1.0262	-.92671	-.69178	.01900
#2	3.3560	-.32434	.49204	.08701	-3.7102	-.36141	-.22447	.03929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 18:56:40 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.7750	.65844	-.60779	-.01949	.10204
Stddev	.4564	.00461	1.8815	.06084	.11776
%RSD	16.445	.69977	309.57	312.22	115.40
#1	-3.0977	.66170	-1.9382	.02353	.01877
#2	-2.4523	.65518	.72263	-.06251	.18531
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43439.	13859.	558250.
Stddev	256.	128.	3325.
%RSD	.58925	.92075	.59555
#1	43258.	13769.	560600.
#2	43620.	13949.	555900.

Sample Name: S 710183-020-020-1/1 Acquired: 12/3/2007 18:59:58 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.0740**	**44353.**	**-11.486**	**.90708**	**38.394**	**2.9801**	**1963.1**
Stddev	.0451	1117.	1.376	.03743	.570	.0080	51.0
%RSD	2.1720	2.5179	11.981	4.1264	1.4850	.26792	2.6001
#1	-2.1058	43564.	-12.460	.88061	38.798	2.9858	1927.0
#2	-2.0421	45143.	-10.513	.93354	37.991	2.9745	1999.1

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.1221**	**12.289**	**460.57**	**150.7**	**232600.**	**1074.8**	**1980.**
Stddev	.2727	.866	6.85	1.9	4404.	27.8	44.
%RSD	12.848	7.0479	1.4865	1.286	1.8934	2.5903	2.218
#1	-1.9293	11.677	465.41	152.0	229480.	1055.1	1949.
#2	-2.3149	12.902	455.73	149.3	235710.	1094.5	2011.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**599.98**	**4.7632**	**109.19**	**114.42**	**405.43**	**2.7762**	**-6.7849**
Stddev	9.10	.0814	28.85	.00	2.38	.9003	.0944
%RSD	1.5172	1.7090	26.427	.00206	.58588	32.431	1.3916
#1	606.42	4.8208	88.784	114.42	407.11	3.4128	-6.7182
#2	593.54	4.7056	129.59	114.42	403.75	2.1396	-6.8517

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**638.29**	**-18.070**	**44.232**	**-29.928**	**11784.**	**4.1972**	**525.07**
Stddev	7.63	.861	.642	2.349	168.	.2327	8.69
%RSD	1.1959	4.7637	1.4522	7.8478	1.4278	5.5440	1.6557
#1	643.69	-18.679	44.686	-31.589	11903.	4.0326	531.22
#2	632.89	-17.461	43.778	-28.267	11665.	4.3617	518.93

Sample Name: S 710183-020-020-1/1 Acquired: 12/3/2007 18:59:58 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	133.94
Stddev	1.36
%RSD	1.0164
#1	134.90
#2	132.97

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43111.	14113.	555970.
Stddev	117.	179.	7660.
%RSD	.27062	1.2688	1.3778
#1	43029.	14239.	550560.
#2	43194.	13986.	561390.

Sample Name: S 710183-021-021-1/1 Acquired: 12/3/2007 19:03:17 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.9998**	**24884.**	**-7.7847**	**2.7938**	**44.993**	**4.1043**	**4245.5**
Stddev	.4368	293.	2.4166	.2550	.003	.1306	36.7
%RSD	21.842	1.1771	31.043	9.1272	.00669	3.1819	.86359
#1	-2.3087	25092.	-9.4935	2.9741	44.995	4.0120	4271.4
#2	-1.6910	24677.	-6.0758	2.6135	44.991	4.1967	4219.6

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.6413**	**22.308**	**522.09**	**138.8**	**244870.**	**1153.9**	**2423.**
Stddev	.1556	.260	.93	1.4	2998.	66.4	25.
%RSD	5.8903	1.1635	.17788	1.032	1.2241	5.7548	1.052
#1	-2.7514	22.124	522.75	139.8	246990.	1200.8	2441.
#2	-2.5313	22.491	521.44	137.8	242750.	1106.9	2405.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**764.41**	**4.4801**	**90.578**	**98.389**	**109.56**	**2.3242**	**-12.160**
Stddev	.69	.0777	1.609	.963	.42	.9387	.788
%RSD	.08975	1.7342	1.7761	.97831	.38737	40.386	6.4806
#1	764.90	4.5351	91.716	99.069	109.26	1.6605	-12.718
#2	763.93	4.4252	89.441	97.708	109.86	2.9880	-11.603

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**605.97**	**-27.311**	**67.880**	**-36.980**	**16061.**	**1.3157**	**673.30**
Stddev	3.88	.755	.035	.428	39.	1.4455	.87
%RSD	.64053	2.7641	.05105	1.1583	.24128	109.87	.12992
#1	603.23	-27.845	67.855	-36.677	16089.	.29356	672.68
#2	608.72	-26.777	67.904	-37.283	16034.	2.3378	673.91

Sample Name: S 710183-021-021-1/1 Acquired: 12/3/2007 19:03:17 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	168.57
Stddev	.47
%RSD	.27800
#1	168.91
#2	168.24

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42717.	13808.	555430.
Stddev	92.	92.	162.
%RSD	.21427	.66842	.02914
#1	42653.	13743.	555540.
#2	42782.	13874.	555320.

Sample Name: S 710183-022-022-1/1 Acquired: 12/3/2007 19:06:36 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.4523**	**35309.**	**-4.0213**	**.72265**	**43.009**	**3.4735**	**987.13**
Stddev	.0027	501.	1.6359	.20713	.148	.1647	14.47
%RSD	.18269	1.4191	40.681	28.662	.34360	4.7419	1.4660
#1	-1.4504	34955.	-2.8645	.86911	42.904	3.5900	976.90
#2	-1.4542	35664.	-5.1780	.57619	43.113	3.3570	997.36

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.4486**	**17.684**	**500.65**	**109.5**	**228890.**	**842.00**	**1475.**
Stddev	.1211	.398	3.52	.3	3391.	2.98	21.
%RSD	4.9477	2.2513	.70403	.2868	1.4816	.35352	1.441
#1	-2.3630	17.402	498.16	109.3	226490.	839.90	1460.
#2	-2.5343	17.965	503.15	109.7	231290.	844.11	1490.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**802.96**	**4.5124**	**101.23**	**100.14**	**35.739**	**.27320**	**-8.3598**
Stddev	4.38	.1258	32.43	.15	.660	.00709	1.7321
%RSD	.54603	2.7886	32.039	.14625	1.8477	2.5953	20.719
#1	799.86	4.4234	124.16	100.04	35.272	.27822	-9.5846
#2	806.06	4.6014	78.293	100.24	36.206	.26819	-7.1350

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**642.43**	**-21.925**	**30.645**	**-28.146**	**13754.**	**.88055**	**616.14**
Stddev	3.00	.970	.162	1.550	113.	1.9122	2.46
%RSD	.46729	4.4250	.52963	5.5072	.82059	217.17	.39849
#1	640.31	-22.611	30.530	-29.242	13834.	2.2327	614.40
#2	644.55	-21.239	30.760	-27.050	13674.	-.47161	617.88

Sample Name: S 710183-022-022-1/1 Acquired: 12/3/2007 19:06:36 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	132.23
Stddev	.51
%RSD	.38790
#1	132.59
#2	131.86

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42797.	13711.	550190.
Stddev	15.	200.	3121.
%RSD	.03619	1.4617	.56734
#1	42808.	13852.	552400.
#2	42786.	13569.	547980.

Sample Name: S 710183-023-023-1/1 Acquired: 12/3/2007 19:09:56 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.89258**	**21923.**	**-6.8032**	**2.6170**	**51.979**	**4.8880**	**1733.8**
Stddev	.21718	369.	.5076	.2385	.197	.2860	12.3
%RSD	24.332	1.6838	7.4616	9.1151	.37921	5.8515	.71085
#1	-.73901	22184.	-7.1621	2.7856	52.118	5.0902	1742.5
#2	-1.0461	21662.	-6.4443	2.4483	51.839	4.6857	1725.1

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.8785**	**26.435**	**529.75**	**119.1**	**251490.**	**599.99**	**2198.**
Stddev	.1163	.365	2.12	.7	3188.	37.12	31.
%RSD	4.0406	1.3806	.40073	.5584	1.2677	6.1862	1.404
#1	-2.9608	26.177	531.25	119.6	253750.	573.75	2220.
#2	-2.7963	26.693	528.25	118.6	249240.	626.24	2176.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1261.0**	**4.7310**	**90.236**	**94.205**	**93.755**	**1.2943**	**-8.6796**
Stddev	4.7	.1686	18.926	.115	2.134	2.3549	1.3575
%RSD	.37319	3.5632	20.974	.12227	2.2765	181.94	15.641
#1	1264.4	4.8502	103.62	94.124	95.265	-.37082	-7.7196
#2	1257.7	4.6118	76.854	94.287	92.246	2.9595	-9.6395

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**484.93**	**-32.679**	**37.584**	**-35.065**	**18762.**	**3.4184**	**809.37**
Stddev	2.42	.350	.131	1.528	293.	.6866	4.15
%RSD	.49893	1.0698	.34912	4.3565	1.5592	20.085	.51269
#1	486.64	-32.927	37.676	-33.984	18969.	2.9329	812.31
#2	483.22	-32.432	37.491	-36.145	18555.	3.9038	806.44

Sample Name: S 710183-023-023-1/1 Acquired: 12/3/2007 19:09:56 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	174.39
Stddev	.05
%RSD	.02759
#1	174.36
#2	174.42

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43204.	13774.	557580.
Stddev	42.	116.	348.
%RSD	.09793	.84311	.06245
#1	43175.	13692.	557330.
#2	43234.	13856.	557820.

Sample Name: S 710183-024-024-1/1 Acquired: 12/3/2007 19:13:16 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.77419**	**27743.**	**-6.2570**	**3.5204**	**58.537**	**3.5728**	**2620.8**
Stddev	.02009	128.	.4000	.2954	.520	.0323	23.9
%RSD	2.5947	.46086	6.3935	8.3920	.88907	.90445	.91237
#1	-.75998	27653.	-6.5398	3.7293	58.905	3.5499	2603.9
#2	-.78839	27833.	-5.9741	3.3115	58.169	3.5956	2637.7

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.2075**	**20.477**	**428.74**	**117.1**	**234010.**	**999.40**	**2014.**
Stddev	.0824	.182	5.07	.2	1213.	77.55	6.
%RSD	3.7319	.88977	1.1826	.1640	.51848	7.7600	.2867
#1	-2.1493	20.348	432.33	116.9	233150.	944.57	2010.
#2	-2.2658	20.605	425.16	117.2	234870.	1054.2	2019.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**924.06**	**4.2073**	**100.18**	**93.258**	**115.07**	**1.5977**	**-11.985**
Stddev	11.95	.0492	9.02	1.034	.46	1.8372	2.249
%RSD	1.2926	1.1695	9.0085	1.1090	.39731	114.99	18.767
#1	932.51	4.1725	93.796	93.989	114.75	2.8968	-13.576
#2	915.62	4.2421	106.56	92.527	115.39	.29866	-10.395

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**630.78**	**-24.021**	**52.846**	**-28.507**	**14696.**	**.62868**	**630.35**
Stddev	7.68	.626	.563	1.173	209.	.88312	8.24
%RSD	1.2170	2.6069	1.0660	4.1154	1.4209	140.47	1.3069
#1	636.20	-23.578	53.244	-29.336	14844.	1.2531	636.18
#2	625.35	-24.463	52.447	-27.677	14549.	.00422	624.53

Sample Name: S 710183-024-024-1/1 Acquired: 12/3/2007 19:13:16 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	148.97
Stddev	.83
%RSD	.55924
#1	149.56
#2	148.38

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43324.	13974.	562910.
Stddev	159.	140.	5381.
%RSD	.36672	1.0025	.95594
#1	43212.	14073.	559110.
#2	43437.	13875.	566720.

Sample Name: S 710183-025-025-1/1 Acquired: 12/3/2007 19:16:35 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.70145	98525.	-1.1346	-2.9135	13.357	^ *****	461.07	-.83220
Stddev	.51998	1349.	1.5954	.0155	.026	-----	5.93	.06875
%RSD	74.129	1.3687	140.62	.53065	.19587	-----	1.2851	8.2616
#1	-1.0691	99479.	-.00645	-2.9244	13.338	^ -----	465.26	-.78358
#2	-.33377	97572.	-2.2627	-2.9025	13.375	^ -----	456.89	-.88081

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.5718	215.61	71.81	90372.	242.11	527.4	198.64	1.7524
Stddev	.0553	1.20	.89	1120.	111.35	9.2	.97	.1180
%RSD	.99242	.55863	1.237	1.2395	45.993	1.742	.49002	6.7318
#1	5.5327	216.46	72.43	91164.	163.37	533.9	199.33	1.6690
#2	5.6109	214.75	71.18	89580.	320.85	520.9	197.95	1.8359

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	75.184	102.91	45.407	-1.0177	2.7525	540.89	-6.8895	8.5771
Stddev	5.145	.26	2.338	2.8195	1.1228	3.84	1.5806	.0488
%RSD	6.8429	.25370	5.1493	277.05	40.791	.71053	22.942	.56905
#1	71.546	103.10	43.753	.97599	1.9586	543.61	-8.0072	8.6117
#2	78.822	102.73	47.060	-3.0114	3.5465	538.17	-5.7719	8.5426

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-12.634	5104.8	-.38790	201.65	33.756
Stddev	1.513	46.9	2.3730	.47	.158
%RSD	11.976	.91954	611.77	.23098	.46840
#1	-11.564	5138.0	-2.0659	201.98	33.867
#2	-13.704	5071.6	1.2901	201.32	33.644

Sample Name: S 710183-025-025-1/1 Acquired: 12/3/2007 19:16:35 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43716.	13831.	569480.
Stddev	115.	131.	1209.
%RSD	.26391	.94718	.21225
#1	43634.	13739.	570330.
#2	43797.	13924.	568620.

Sample Name: S 710183-026-026-1/1 Acquired: 12/3/2007 19:19:54 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.0754**	**49702.**	**-2.1752**	**-1.4319**	**32.701**	**2.9287**	**1276.8**
Stddev	.2906	4382.	4.3352	.5271	.287	.0000	105.6
%RSD	27.026	8.8166	199.30	36.814	.87877	.00056	8.2699
#1	-1.2809	46603.	-5.2407	-1.8046	32.904	2.9287	1202.1
#2	-.86989	52800.	.89019	-1.0591	32.498	2.9286	1351.5

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.6602**	**13.059**	**362.98**	**76.80**	**226160.**	**611.46**	**2047.**
Stddev	1.1973	.083	2.46	.11	20103.	33.24	179.
%RSD	45.007	.63197	.67791	.1479	8.8890	5.4358	8.752
#1	-1.8136	13.000	364.72	76.72	211940.	587.95	1920.
#2	-3.5067	13.117	361.24	76.88	240370.	634.96	2174.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**496.57**	**4.7128**	**73.963**	**74.204**	**68.076**	**-.06465**	**1.0764**
Stddev	3.34	.3271	6.857	1.304	1.775	1.9030	1.8973
%RSD	.67307	6.9397	9.2715	1.7568	2.6075	2943.5	176.26
#1	498.93	4.4815	69.114	73.282	69.331	1.2810	-.26514
#2	494.20	4.9441	78.812	75.125	66.821	-1.4103	2.4180

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**598.33**	**-20.383**	**24.992**	**-24.123**	**12554.**	**2.2525**	**547.03**
Stddev	1.82	.960	.149	5.834	142.	.7152	4.43
%RSD	.30381	4.7084	.59799	24.186	1.1285	31.751	.80990
#1	599.62	-19.704	25.097	-28.248	12655.	2.7582	550.16
#2	597.05	-21.062	24.886	-19.997	12454.	1.7468	543.89

Sample Name: S 710183-026-026-1/1 Acquired: 12/3/2007 19:19:54 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	**83.326**
Stddev	2.249
%RSD	2.6994
#1	84.917
#2	81.736

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43252.	13225.	562440.
Stddev	1.	952.	2609.
%RSD	.00193	7.2010	.46384
#1	43252.	13899.	560590.
#2	43253.	12552.	564280.

Sample Name: BLK043 Acquired: 12/3/2007 19:23:13 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06739	27.643	-2.0957	-9.3000	-.03781	.03671	13.518
Stddev	.15365	15.005	1.2090	.1761	.00827	.00369	1.363
%RSD	228.01	54.280	57.689	1.8933	21.881	10.043	10.083
#1	-.04126	38.253	-2.9506	-9.1755	-.03196	.03410	12.554
#2	.17603	17.033	-1.2408	-9.4245	-.04366	.03932	14.482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.22834	.06091	1.6348	-1.090	2.7765	26.378	1.109
Stddev	.02171	.03789	.0119	1.041	4.6377	21.135	.084
%RSD	9.5076	62.202	.72727	95.44	167.03	80.124	7.552
#1	-.24369	.03412	1.6432	-1.826	-.50281	11.433	1.168
#2	-.21299	.08770	1.6264	-.3545	6.0559	41.323	1.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01005	.27641	7.7714	-.51737	.54498	.35532	.43042
Stddev	.00938	.17214	.6745	.31884	.93861	.76564	2.6812
%RSD	93.371	62.279	8.6794	61.627	172.23	215.48	622.93
#1	.01668	.15468	8.2483	-.74282	-.11872	.89671	-1.4655
#2	.00341	.39813	7.2944	-.29191	1.2087	-.18606	2.3263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: BLK043 Acquired: 12/3/2007 19:23:13 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.5739	F 26.322	-.01402	-3.0604	1.3824	-6.5246	-.30266
Stddev	.0097	.210	.01390	.8790	.2625	.5629	.05254
%RSD	.14807	.79648	99.149	28.722	18.988	8.6278	17.359
#1	6.5670	26.470	-.02385	-3.6819	1.5681	-6.9227	-.26551
#2	6.5808	26.174	-.00419	-2.4388	1.1968	-6.1266	-.33981
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		20.000					
Low Limit		-20.000					

Elem	Zn
Units	ppb
Avg	2.0734
Stddev	.0128
%RSD	.61580
#1	2.0644
#2	2.0824
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	41766.	13365.	547210.
Stddev	60.	163.	1761.
%RSD	.14283	1.2174	.32176
#1	41723.	13250.	545960.
#2	41808.	13480.	548450.

Sample Name: BKS043 Acquired: 12/3/2007 19:26:31 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**103.79**	**10187.**	**107.90**	**981.68**	**1045.3**	**51.957**	**10325.**
Stddev	.55	109.	2.31	.86	4.2	.333	138.
%RSD	.52907	1.0721	2.1399	.08746	.39994	.64148	1.3348
#1	103.40	10110.	106.26	982.28	1042.3	51.722	10227.
#2	104.18	10265.	109.53	981.07	1048.2	52.193	10422.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**108.23**	**524.08**	**515.52**	**F 513.5**	**10093.**	**9956.4**	**F 10350.**
Stddev	.11	.96	2.46	1.4	139.	136.7	90.
%RSD	.10611	.18363	.47655	.2768	1.3796	1.3729	.8700
#1	108.31	523.40	513.79	514.5	9994.8	9859.7	10280.
#2	108.15	524.76	517.26	512.5	10192.	10053.	10410.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value				100.0			100.0
Range				20.00%			20.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1025.2**	**551.69**	**10851.**	**525.93**	**1060.9**	**98.630**	**98.399**
Stddev	3.9	.40	74.	.02	.3	1.372	1.376
%RSD	.38168	.07257	.68033	.00368	.03276	1.3914	1.3979
#1	1022.5	551.41	10799.	525.94	1060.6	99.600	97.426
#2	1028.0	551.98	10903.	525.92	1061.1	97.660	99.372
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: BKS043 Acquired: 12/3/2007 19:26:31 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8563.5	567.87	F 1036.2	396.18	2062.5	103.80	530.00
Stddev	30.8	.61	.4	1.46	11.0	1.01	1.96
%RSD	.35912	.10654	.04001	.36845	.53266	.97362	.36953
#1	8541.7	567.45	1036.5	397.21	2054.8	104.51	528.62
#2	8585.2	568.30	1035.9	395.15	2070.3	103.08	531.39
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			500.00				
Range			20.000%				

Elem	Zn
Units	ppb
Avg	1024.0
Stddev	.1
%RSD	.00666
#1	1023.9
#2	1024.0
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	41700.	13663.	550010.
Stddev	82.	246.	1470.
%RSD	.19752	1.8035	.26737
#1	41758.	13838.	551050.
#2	41642.	13489.	548970.

Sample Name: S 710183-027-027-1/1 Acquired: 12/3/2007 19:29:59 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7.8862**	**29124.**	**.65881**	**21.236**	**97.674**	**2.3591**	**3436.2**
Stddev	.3604	148.	.91823	.073	.124	.0181	7.3
%RSD	4.5695	.50980	139.38	.34375	.12727	.76748	.21354
#1	8.1410	29019.	1.3081	21.288	97.762	2.3463	3431.0
#2	7.6313	29229.	.00952	21.185	97.586	2.3719	3441.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.3664**	**55.415**	**519.48**	**233.6**	**181820.**	**1238.3**	**2507.**
Stddev	.0721	.076	.88	2.7	105.	58.4	6.
%RSD	5.2755	.13700	.16948	1.173	.05750	4.7196	.2280
#1	-1.4174	55.468	520.10	235.5	181890.	1279.6	2503.
#2	-1.3154	55.361	518.86	231.7	181740.	1196.9	2511.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4258.8**	**2.4020**	**155.40**	**126.97**	**60.785**	**1.5097**	**-15.016**
Stddev	17.5	.3034	29.51	.24	.333	1.0427	2.875
%RSD	.41035	12.630	18.987	.19075	.54726	69.069	19.147
#1	4271.1	2.6166	134.54	127.14	60.550	.77237	-12.983
#2	4246.4	2.1875	176.27	126.79	61.020	2.2470	-17.049

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**757.64**	**-17.076**	**51.967**	**-24.590**	**10560.**	**4.5604**	**493.10**
Stddev	9.07	.138	.147	2.021	94.	.5095	1.18
%RSD	1.1976	.80746	.28237	8.2182	.88730	11.173	.23973
#1	764.06	-17.173	52.071	-26.019	10626.	4.9207	493.94
#2	751.23	-16.978	51.864	-23.161	10494.	4.2001	492.27

Sample Name: S 710183-027-027-1/1 Acquired: 12/3/2007 19:29:59 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	129.22
Stddev	.32
%RSD	.24971
#1	129.45
#2	129.00

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43243.	13740.	561310.
Stddev	52.	6.	531.
%RSD	.11970	.04573	.09457
#1	43206.	13735.	560930.
#2	43279.	13744.	561680.

Sample Name: CCV Acquired: 12/3/2007 19:33:23 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	527.43	52174.	539.02	520.67	512.79	51.936
Stddev	1.27	396.	1.07	.31	1.36	.125
%RSD	.24079	.75957	.19832	.05913	.26536	.23995
#1	528.33	51893.	539.78	520.46	513.75	52.024
#2	526.53	52454.	538.26	520.89	511.83	51.848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	102650.	520.71	514.00	507.47	520.8	50370.
Stddev	1037.	.05	.36	1.15	1.1	610.
%RSD	1.0106	.01026	.07026	.22653	.2062	1.2117
#1	101920.	520.67	514.26	506.66	520.0	49938.
#2	103390.	520.75	513.75	508.28	521.6	50801.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25735.	F 100700.	505.36	532.48	106680.	508.44
Stddev	158.	394.	.55	1.66	1213.	.68
%RSD	.61550	.3913	.10895	.31085	1.1369	.13414
#1	25623.	100400.	505.75	531.31	105820.	507.96
#2	25847.	101000.	504.97	533.65	107540.	508.93
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 19:33:23 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	518.11	533.06	530.41	535.27	525.89	512.31
Stddev	1.73	.94	1.63	1.32	.65	2.44
%RSD	.33480	.17645	.30824	.24700	.12275	.47614
#1	516.88	533.73	531.56	534.34	525.43	514.03
#2	519.33	532.40	529.25	536.21	526.35	510.58
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	524.01	519.20	527.29	520.90	523.23
Stddev	2.68	.54	.55	.78	.06
%RSD	.51049	.10385	.10483	.14886	.01227
#1	525.90	519.58	527.68	521.45	523.18
#2	522.12	518.82	526.90	520.35	523.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42565.	13649.	549110.
Stddev	91.	70.	331.
%RSD	.21400	.51160	.06034
#1	42630.	13698.	548880.
#2	42501.	13599.	549340.

Sample Name: CCB Acquired: 12/3/2007 19:36:52 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20300	4.8821	1.1567	-10.955	.03223	.00762	16.000	.03446
Stddev	.20320	1.1134	3.0254	.587	.00148	.00575	4.533	.02352
%RSD	100.10	22.805	261.56	5.3610	4.6052	75.452	28.331	68.260
#1	.05932	4.0949	-.98261	-10.540	.03328	.01168	19.205	.05109
#2	.34668	5.6694	3.2960	-11.371	.03118	.00355	12.794	.01783
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20193	-.10285	-1.506	2.7377	-15.258	F 14.13	.13129	.38909
Stddev	.27888	.30726	.081	9.5467	83.497	1.53	.07201	.17470
%RSD	138.11	298.76	5.364	348.71	547.22	10.86	54.844	44.899
#1	.39913	.11442	-1.449	9.4883	-74.300	15.21	.08038	.51262
#2	.00472	-.32011	-1.563	-4.0128	43.783	13.04	.18221	.26556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	75.564	-.09084	-.93283	.66696	-3.8807	.53906	-.18232	.06865
Stddev	11.529	.15016	.92753	.13643	.9562	.05262	.10518	.00493
%RSD	15.257	165.30	99.431	20.455	24.639	9.7613	57.688	7.1835
#1	83.716	-.19702	-1.5887	.57049	-4.5568	.50185	-.10795	.06516
#2	67.412	.01534	-.27697	.76343	-3.2046	.57627	-.25669	.07213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 19:36:52 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.8695	.34065	.77344	.01067	.23035
Stddev	2.4761	.15813	1.0743	.17474	.10337
%RSD	132.45	46.422	138.90	1637.6	44.874
#1	-3.6204	.22883	1.5331	.13423	.15726
#2	-.11861	.45246	.01379	-.11289	.30345
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	44062.	13720.	561550.
Stddev	22.	162.	4372.
%RSD	.05038	1.1834	.77850
#1	44077.	13605.	558450.
#2	44046.	13835.	564640.

Sample Name: SP710183-027-027-1/1 Acquired: 12/3/2007 19:40:10 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.495**	**48558.**	**8.7105**	**115.81**	**208.04**	^ *****	**4752.7**
Stddev	.675	359.	2.0406	.56	1.33	-----	26.5
%RSD	3.6520	.73949	23.427	.48548	.64153	-----	.55713
#1	18.972	48812.	10.153	115.41	208.99	^ -----	4771.5
#2	18.017	48304.	7.2676	116.21	207.10	7.0151	4734.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9.0137**	**109.95**	**609.25**	**295.1**	**195340.**	**2511.2**	**3877.**
Stddev	.2337	.17	5.70	.0	1570.	29.2	33.
%RSD	2.5928	.15503	.93608	.0090	.80393	1.1619	.8570
#1	8.8485	110.07	613.28	295.1	196450.	2531.8	3900.
#2	9.1790	109.83	605.21	295.1	194230.	2490.5	3853.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4594.9**	**50.102**	**1329.2**	**224.05**	**173.84**	**8.1859**	**-10.438**
Stddev	2.1	.158	16.8	.16	.74	.3705	.262
%RSD	.04644	.31541	1.2651	.07021	.42586	4.5265	2.5058
#1	4593.4	50.213	1317.3	224.16	173.31	7.9239	-10.254
#2	4596.4	49.990	1341.1	223.94	174.36	8.4479	-10.623

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**888.55**	**33.405**	**161.49**	**13.122**	**11072.**	**15.553**	**559.96**
Stddev	.01	.760	1.07	1.407	156.	1.406	3.44
%RSD	.00073	2.2745	.66405	10.722	1.4079	9.0393	.61501
#1	888.55	32.867	162.24	12.127	11182.	14.559	562.39
#2	888.56	33.942	160.73	14.116	10962.	16.548	557.52

Sample Name: SP710183-027-027-1/1 Acquired: 12/3/2007 19:40:10 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	244.89
Stddev	.19
%RSD	.07559
#1	245.02
#2	244.76

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43302.	13661.	563710.
Stddev	62.	114.	2892.
%RSD	.14208	.83491	.51299
#1	43259.	13580.	561660.
#2	43346.	13742.	565750.

Sample Name: SD710183-027-027-1/1 Acquired: 12/3/2007 19:43:33 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.062**	**48716.**	**9.9951**	**109.73**	**207.07**	**6.9993**	**4697.5**
Stddev	.335	17.	.8804	1.39	3.60	.0825	16.8
%RSD	1.8572	.03414	8.8079	1.2705	1.7371	1.1784	.35794
#1	18.299	48705.	10.618	110.72	209.61	7.0576	4685.6
#2	17.825	48728.	9.3726	108.75	204.52	6.9410	4709.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7.6082**	**103.34**	**598.37**	**283.2**	**196200.**	**2476.6**	**3890.**
Stddev	.1555	.05	9.84	2.4	60.	3.4	7.
%RSD	2.0443	.05176	1.6437	.8397	.03046	.13826	.1725
#1	7.7182	103.38	605.32	284.8	196160.	2479.0	3886.
#2	7.4982	103.30	591.41	281.5	196240.	2474.2	3895.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4572.5**	**47.518**	**1295.4**	**216.21**	**154.50**	**3.7982**	**-6.4994**
Stddev	96.0	.040	11.1	1.12	1.04	.6643	3.9881
%RSD	2.0994	.08519	.85726	.51818	.67185	17.491	61.361
#1	4640.4	47.490	1287.5	217.00	155.23	3.3284	-9.3195
#2	4504.7	47.547	1303.3	215.42	153.76	4.2679	-3.6794

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**862.89**	**30.405**	**157.14**	**12.998**	**11297.**	**16.021**	**554.70**
Stddev	16.57	.033	2.83	2.912	128.	1.798	10.21
%RSD	1.9209	.10913	1.8039	22.403	1.1299	11.225	1.8401
#1	874.62	30.381	159.15	15.056	11388.	14.749	561.92
#2	851.17	30.428	155.14	10.939	11207.	17.292	547.48

Sample Name: SD710183-027-027-1/1 Acquired: 12/3/2007 19:43:33 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	232.31
Stddev	.49
%RSD	.21220
#1	232.66
#2	231.96

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43393.	13793.	558850.
Stddev	19.	101.	759.
%RSD	.04347	.72944	.13590
#1	43379.	13865.	559390.
#2	43406.	13722.	558320.

Sample Name: PS710183-027-027-1/1 Acquired: 12/3/2007 19:46:56 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**55.701**	**33866.**	**88.464**	**88.957**	**118.59**	**12.927**	**10387.**
Stddev	3.394	572.	4.534	3.198	7.75	.914	212.
%RSD	6.0934	1.6885	5.1253	3.5950	6.5323	7.0707	2.0404
#1	58.101	34270.	91.670	91.219	124.07	13.573	10536.
#2	53.301	33461.	85.258	86.696	113.12	12.281	10237.

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**16.273**	**73.508**	**521.08**	**226.1**	**205370.**	**8122.7**	**9471.**
Stddev	.474	.682	34.84	7.1	4023.	93.6	170.
%RSD	2.9129	.92775	6.6862	3.152	1.9588	1.1519	1.800
#1	16.608	73.991	545.71	231.1	208210.	8188.8	9591.
#2	15.938	73.026	496.44	221.0	202530.	8056.5	9350.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4478.9**	**32.606**	**7211.1**	**151.49**	**126.09**	**78.755**	**62.922**
Stddev	324.4	1.305	117.8	4.47	5.45	1.445	.184
%RSD	7.2417	4.0039	1.6341	2.9511	4.3229	1.8343	.29200
#1	4708.2	33.529	7294.4	154.65	129.95	79.776	63.052
#2	4249.5	31.683	7127.8	148.33	122.24	77.733	62.792

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6193.9**	**86.417**	**73.352**	**485.53**	**10631.**	**109.17**	**494.88**
Stddev	421.5	2.002	4.918	15.82	799.	4.61	32.45
%RSD	6.8044	2.3166	6.7049	3.2585	7.5183	4.2259	6.5582
#1	6491.9	87.833	76.830	496.72	11196.	112.43	517.83
#2	5895.8	85.002	69.875	474.35	10066.	105.90	471.93

Sample Name: PS710183-027-027-1/1 Acquired: 12/3/2007 19:46:56 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	183.81
Stddev	4.18
%RSD	2.2741
#1	186.77
#2	180.86

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43618.	13773.	557780.
Stddev	42.	35.	725.
%RSD	.09637	.25222	.12998
#1	43588.	13749.	557270.
#2	43648.	13798.	558290.

Sample Name: SE710183-027-027-1/1 Acquired: 12/3/2007 19:50:19 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.0340**	**6325.0**	**.25329**	**-3.6321**	**19.876**	**.40224**	**752.03**	**-.59181**
Stddev	.6167	29.3	2.1978	.0805	1.161	.01813	5.98	.04537
%RSD	30.317	.46323	867.71	2.2168	5.8391	4.5076	.79518	7.6663
#1	2.4701	6345.7	-1.3008	-3.6891	20.697	.41506	756.26	-.62389
#2	1.5980	6304.3	1.8074	-3.5752	19.056	.38942	747.80	-.55972

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**10.148**	**104.46**	**43.50**	**41453.**	**271.23**	**555.7**	**884.25**	**.42591**
Stddev	.325	6.01	.60	67.	84.92	2.5	51.31	.03501
%RSD	3.2065	5.7506	1.378	.16252	31.308	.4446	5.8030	8.2195
#1	9.9177	108.71	43.92	41501.	331.28	557.4	920.53	.40116
#2	10.378	100.22	43.07	41406.	211.18	553.9	847.97	.45067

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**54.916**	**24.085**	**11.107**	**.21707**	**-3.3235**	**152.09**	**-3.1897**	**10.344**
Stddev	30.224	.046	.617	.41788	2.7721	8.30	.7685	.607
%RSD	55.037	.19141	5.5505	192.51	83.408	5.4591	24.094	5.8676
#1	76.288	24.117	11.543	-.07842	-5.2836	157.96	-3.7331	10.773
#2	33.545	24.052	10.672	.51256	-1.3634	146.22	-2.6463	9.9146

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-3.2280**	**2152.2**	**-.14434**	**99.386**	**23.519**
Stddev	1.0999	124.3	.54158	5.466	.147
%RSD	34.073	5.7737	375.22	5.4999	.62439
#1	-2.4503	2240.0	-.52729	103.25	23.623
#2	-4.0058	2064.3	.23862	95.521	23.416

Sample Name: SE710183-027-027-1/1 Acquired: 12/3/2007 19:50:19 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43993.	13998.	565680.
Stddev	17.	128.	563.
%RSD	.03878	.91704	.09956
#1	44005.	14089.	565280.
#2	43981.	13907.	566080.

Sample Name: S 710183-028-028-1/1 Acquired: 12/3/2007 19:53:34 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**24.265**	**38526.**	**12.733**	**43.445**	**132.85**	**1.4858**	**2609.1**
Stddev	.030	491.	1.810	.383	.65	.0674	39.3
%RSD	.12190	1.2743	14.215	.88229	.48947	4.5384	1.5067
#1	24.244	38179.	11.453	43.716	133.31	1.5334	2581.3
#2	24.286	38873.	14.013	43.174	132.39	1.4381	2636.9

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.1603**	**99.363**	**339.32**	**191.2**	**134610.**	**1450.1**	**1926.**
Stddev	.0147	.311	.06	.4	1444.	145.7	18.
%RSD	1.2626	.31335	.01806	.2289	1.0726	10.047	.9447
#1	-1.1500	99.584	339.36	190.9	133590.	1347.1	1913.
#2	-1.1707	99.143	339.27	191.5	135630.	1553.1	1939.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**11120.**	**2.1637**	**188.89**	**138.69**	**21.023**	**-1.3616**	**-23.754**
Stddev	51.	.0733	9.86	.29	1.516	1.1612	.131
%RSD	.45444	3.3857	5.2212	.20628	7.2125	85.277	.55236
#1	11156.	2.2155	195.87	138.89	22.095	-.54057	-23.661
#2	11084.	2.1119	181.92	138.49	19.951	-2.1827	-23.847

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**794.18**	**-11.594**	**37.079**	**-21.931**	**7200.4**	**6.9700**	**311.49**
Stddev	4.57	.792	.117	1.829	21.4	1.4194	.34
%RSD	.57525	6.8290	.31554	8.3384	.29668	20.365	.10987
#1	797.41	-11.034	37.162	-23.224	7215.5	5.9663	311.74
#2	790.94	-12.154	36.997	-20.638	7185.3	7.9737	311.25

Sample Name: S 710183-028-028-1/1 Acquired: 12/3/2007 19:53:34 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	85.490
Stddev	.071
%RSD	.08303
#1	85.540
#2	85.439

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43556.	14049.	564750.
Stddev	7.	212.	2441.
%RSD	.01640	1.5113	.43227
#1	43561.	14199.	566470.
#2	43551.	13898.	563020.

Sample Name: S 710183-029-029-1/1 Acquired: 12/3/2007 19:56:59 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.2194**	**42478.**	**1.1790**	**7.7777**	**173.65**	**2.2635**	**1780.5**
Stddev	.1346	45.	1.5026	.2581	.64	.0282	6.1
%RSD	2.5780	.10498	127.45	3.3182	.37028	1.2458	.34535
#1	5.3146	42510.	.11652	7.5952	174.10	2.2436	1784.9
#2	5.1243	42447.	2.2415	7.9602	173.19	2.2835	1776.2

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.3186**	**30.576**	**395.62**	**117.5**	**149460.**	**884.49**	**1799.**
Stddev	.1312	.422	1.92	.7	863.	54.62	.
%RSD	9.9473	1.3808	.48406	.6087	.57770	6.1756	.0151
#1	-1.2258	30.874	396.98	118.0	148850.	845.87	1799.
#2	-1.4113	30.277	394.27	117.0	150070.	923.12	1799.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2921.4**	**1.8787**	**134.36**	**154.22**	**15.094**	**-.70396**	**-8.8032**
Stddev	13.6	.3296	4.06	.64	.411	1.8313	.8754
%RSD	.46699	17.545	3.0213	.41249	2.7215	260.15	9.9444
#1	2931.1	2.1118	137.23	154.67	15.385	.59098	-8.1841
#2	2911.8	1.6456	131.49	153.77	14.804	-1.9989	-9.4222

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**745.06**	**-14.609**	**26.357**	**-18.217**	**9518.3**	**5.2670**	**426.03**
Stddev	6.82	.240	.122	1.932	62.7	.7037	1.94
%RSD	.91580	1.6435	.46350	10.605	.65846	13.361	.45485
#1	749.89	-14.779	26.444	-19.583	9474.0	4.7694	427.40
#2	740.24	-14.439	26.271	-16.851	9562.6	5.7646	424.66

Sample Name: S 710183-029-029-1/1 Acquired: 12/3/2007 19:56:59 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	107.84
Stddev	.47
%RSD	.43580
#1	108.17
#2	107.51

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43405.	13828.	561300.
Stddev	18.	21.	979.
%RSD	.04170	.14976	.17444
#1	43418.	13842.	561990.
#2	43392.	13813.	560600.

Sample Name: S 710183-030-030-1/1 Acquired: 12/3/2007 20:00:19 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5893	28619.	-5.4306	-2.5800	19.433	2.5990	374.18
Stddev	.0173	36.	.5260	.0142	.030	.0311	8.57
%RSD	1.0911	.12672	9.6866	.55048	.15665	1.1947	2.2897
#1	-1.5770	28644.	-5.0586	-2.5900	19.455	2.6210	380.24
#2	-1.6015	28593.	-5.8025	-2.5699	19.412	2.5771	368.12

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.2219	8.7390	650.79	89.07	252740.	436.35	730.4
Stddev	.2297	.1120	.32	.55	560.	4.39	.4
%RSD	10.338	1.2820	.04960	.6137	.22145	1.0059	.0513
#1	-2.0595	8.6597	651.02	88.69	253140.	439.46	730.6
#2	-2.3843	8.8182	650.57	89.46	252340.	433.25	730.1

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	363.00	3.7849	53.670	62.039	28.922	-.33592	-11.642
Stddev	.84	.0806	14.421	.218	.437	1.6150	.907
%RSD	.23260	2.1307	26.870	.35130	1.5125	480.76	7.7927
#1	363.60	3.8420	43.473	62.194	28.613	.80603	-11.000
#2	362.41	3.7279	63.868	61.885	29.231	-1.4779	-12.283

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	688.61	-17.417	9.9088	-25.732	11290.	2.0869	549.07
Stddev	2.56	.335	.0468	2.630	51.	.1415	.92
%RSD	.37200	1.9258	.47202	10.221	.45013	6.7799	.16834
#1	690.42	-17.180	9.9419	-23.873	11326.	2.1869	549.73
#2	686.80	-17.654	9.8757	-27.592	11254.	1.9868	548.42

Sample Name: S 710183-030-030-1/1 Acquired: 12/3/2007 20:00:19 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	78.578
Stddev	.045
%RSD	.05723
#1	78.546
#2	78.610

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42925.	13801.	558840.
Stddev	19.	52.	798.
%RSD	.04366	.37319	.14272
#1	42939.	13765.	559400.
#2	42912.	13838.	558280.

Sample Name: S 710183-031-031-1/1 Acquired: 12/3/2007 20:03:40 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.2233**	**23634.**	**-3.9291**	**-2.1315**	**22.754**	**2.6905**	**509.98**
Stddev	.3568	221.	.6094	.0873	.138	.0697	11.67
%RSD	29.170	.93666	15.509	4.0961	.60735	2.5891	2.2874
#1	-1.4756	23791.	-3.4982	-2.1932	22.852	2.7398	518.23
#2	-.97098	23478.	-4.3599	-2.0697	22.657	2.6413	501.73

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.2513**	**19.607**	**587.89**	**164.6**	**228300.**	**585.56**	**1607.**
Stddev	.2426	.117	4.09	1.7	2396.	36.71	19.
%RSD	10.777	.59472	.69613	1.059	1.0495	6.2693	1.181
#1	-2.4228	19.524	590.79	165.9	229990.	611.52	1621.
#2	-2.0797	19.689	585.00	163.4	226600.	559.60	1594.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**705.09**	**3.7553**	**52.873**	**91.888**	**20.396**	**-.35696**	**-8.5213**
Stddev	5.20	.0114	.817	.078	.840	.11235	1.4406
%RSD	.73710	.30375	1.5454	.08483	4.1162	31.475	16.906
#1	708.76	3.7473	52.295	91.943	20.990	-.43641	-9.5399
#2	701.41	3.7634	53.451	91.833	19.802	-.27751	-7.5026

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**723.79**	**-17.067**	**13.875**	**-24.660**	**11361.**	**2.6554**	**566.20**
Stddev	10.72	.264	.126	1.565	158.	5.5869	4.58
%RSD	1.4806	1.5489	.90692	6.3462	1.3889	210.39	.80823
#1	731.37	-17.254	13.964	-25.766	11472.	6.6059	569.43
#2	716.21	-16.880	13.786	-23.553	11249.	-1.2951	562.96

Sample Name: S 710183-031-031-1/1 Acquired: 12/3/2007 20:03:40 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	137.04
Stddev	.06
%RSD	.04092
#1	137.08
#2	137.00

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42890.	13461.	553380.
Stddev	40.	61.	3341.
%RSD	.09279	.45098	.60372
#1	42862.	13418.	551020.
#2	42919.	13504.	555750.

Sample Name: S 710183-032-032-1/1 Acquired: 12/3/2007 20:07:00 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**16.727**	**35403.**	**7.3478**	**28.071**	**134.37**	**2.0097**	**742.43**
Stddev	.216	1133.	.7065	.367	1.67	.0488	14.41
%RSD	1.2941	3.1993	9.6151	1.3075	1.2454	2.4272	1.9417
#1	16.880	34602.	6.8482	27.812	135.55	2.0442	732.24
#2	16.574	36204.	7.8474	28.331	133.18	1.9752	752.62

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.4350**	**95.583**	**364.66**	**140.3**	**190560.**	**954.60**	**1075.**
Stddev	.3144	.522	4.08	1.1	5768.	39.65	33.
%RSD	21.907	.54642	1.1176	.7932	3.0270	4.1536	3.028
#1	-1.2127	95.214	367.55	139.5	186480.	926.56	1052.
#2	-1.6573	95.952	361.78	141.1	194640.	982.64	1098.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7950.5**	**3.5004**	**183.35**	**88.814**	**36.244**	**.45982**	**-21.068**
Stddev	92.5	.1434	21.98	.237	.476	.29937	1.703
%RSD	1.1632	4.0958	11.989	.26739	1.3145	65.106	8.0807
#1	8015.9	3.6018	167.81	88.646	36.581	.24813	-22.272
#2	7885.1	3.3991	198.90	88.982	35.907	.67151	-19.865

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**690.44**	**-11.942**	**22.966**	**-24.617**	**8699.4**	**3.2965**	**426.16**
Stddev	9.35	.169	.313	1.231	148.7	1.1080	5.84
%RSD	1.3541	1.4184	1.3638	5.0019	1.7092	33.612	1.3709
#1	697.05	-12.062	23.187	-23.747	8804.6	2.5130	430.29
#2	683.83	-11.822	22.745	-25.488	8594.3	4.0800	422.03

Sample Name: S 710183-032-032-1/1 Acquired: 12/3/2007 20:07:00 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	101.91
Stddev	.18
%RSD	.17409
#1	102.03
#2	101.78

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42882.	13899.	557510.
Stddev	24.	350.	5936.
%RSD	.05630	2.5180	1.0647
#1	42899.	14146.	553310.
#2	42865.	13651.	561710.

Sample Name: S 710183-033-033-1/1 Acquired: 12/3/2007 20:10:26 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.2523**	**46877.**	**-5.6107**	**-3.8854**	**28.254**	**1.8419**	**712.05**
Stddev	.1994	1071.	.5627	.1968	.285	.0358	15.79
%RSD	15.925	2.2838	10.029	5.0661	1.0091	1.9428	2.2180
#1	-1.3933	46120.	-5.2128	-3.7462	28.455	1.8672	700.88
#2	-1.1113	47635.	-6.0085	-4.0246	28.052	1.8166	723.22

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.8899**	**4.4567**	**427.86**	**73.06**	**185730.**	**578.61**	**543.8**
Stddev	.3476	.0850	3.76	2.77	4658.	20.64	13.2
%RSD	18.390	1.9079	.87845	3.787	2.5080	3.5666	2.425
#1	-1.6441	4.3966	430.52	75.02	182440.	593.20	534.5
#2	-2.1356	4.5168	425.20	71.11	189020.	564.02	553.2

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**338.93**	**3.2960**	**70.286**	**89.889**	**18.785**	**-.97833**	**-5.1650**
Stddev	3.36	.2437	13.255	.213	.732	3.5073	2.1573
%RSD	.99051	7.3935	18.858	.23726	3.8978	358.50	41.767
#1	341.30	3.4684	79.658	90.040	18.267	1.5017	-6.6905
#2	336.55	3.1237	60.913	89.738	19.303	-3.4584	-3.6396

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**806.20**	**-10.697**	**18.725**	**-20.420**	**7762.2**	**.41273**	**386.59**
Stddev	10.61	.240	.183	.638	75.0	.80317	4.73
%RSD	1.3155	2.2404	.97816	3.1251	.96672	194.60	1.2226
#1	813.70	-10.866	18.854	-19.969	7815.2	-.15520	389.93
#2	798.70	-10.527	18.595	-20.871	7709.1	.98066	383.25

Sample Name: S 710183-033-033-1/1 Acquired: 12/3/2007 20:10:26 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	62.766
Stddev	.413
%RSD	.65734
#1	63.058
#2	62.475

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43016.	13747.	552610.
Stddev	60.	295.	3327.
%RSD	.14056	2.1455	.60202
#1	43059.	13956.	550260.
#2	42973.	13539.	554960.

Sample Name: CCV Acquired: 12/3/2007 20:13:46 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	530.02	51022.	533.45	518.52	507.40	52.043	99879.
Stddev	1.63	2272.	5.36	.81	2.70	.177	4348.
%RSD	.30793	4.4531	1.0053	.15576	.53160	.34055	4.3531
#1	528.86	49416.	529.65	519.10	509.31	51.918	96804.
#2	531.17	52629.	537.24	517.95	505.50	52.169	102950.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	518.86	513.23	512.86	521.3	48997.	25315.	F 99310.
Stddev	.85	.29	1.29	.7	2053.	1018.	3514.
%RSD	.16323	.05619	.25097	.1253	4.1908	4.0208	3.538
#1	519.45	513.43	511.94	521.8	47545.	24595.	96830.
#2	518.26	513.02	513.77	520.9	50449.	26035.	101800.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							500.0
Range							10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	505.63	530.05	103800.	509.21	517.71	531.88	528.23
Stddev	1.56	.12	4133.	.31	.93	.86	1.80
%RSD	.30914	.02250	3.9814	.06122	.17936	.16177	.34156
#1	504.52	529.97	100880.	509.43	517.05	531.27	529.51
#2	506.73	530.13	106720.	508.99	518.36	532.49	526.95
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 12/3/2007 20:13:46 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	537.67	521.91	511.78	518.59	523.64	520.73	520.33
Stddev	.80	.96	1.16	1.26	1.59	1.67	1.44
%RSD	.14830	.18328	.22589	.24308	.30386	.32117	.27629
#1	537.11	522.58	510.97	517.70	522.51	519.55	519.31
#2	538.23	521.23	512.60	519.48	524.76	521.91	521.35
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Zn
Units	ppb
Avg	524.75
Stddev	1.28
%RSD	.24317
#1	525.66
#2	523.85
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42027.	13781.	541810.
Stddev	116.	433.	1476.
%RSD	.27606	3.1413	.27245
#1	41945.	14087.	542850.
#2	42109.	13475.	540760.

Sample Name: CCB Acquired: 12/3/2007 20:17:14 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.37720	6.5575	-.54782	-11.783	.04143	.01126	15.668	.16367
Stddev	.22204	2.3867	1.9087	.034	.01328	.00274	5.790	.01445
%RSD	58.865	36.397	348.42	.28849	32.051	24.337	36.953	8.8314
#1	.53421	4.8698	-1.8975	-11.759	.03204	.00932	19.762	.17389
#2	.22020	8.2451	.80184	-11.807	.05082	.01320	11.574	.15345
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08724	-.03677	-.1562	1.6796	-34.711	F 13.01	.12203	.57415
Stddev	.24095	.22895	1.282	1.4611	56.366	.10	.01619	.01337
%RSD	276.20	622.63	820.8	86.995	162.39	.7647	13.270	2.3288
#1	.25762	-.19867	-1.063	2.7127	-74.568	12.93	.11058	.56469
#2	-.08314	.12512	.7503	.64638	5.1456	13.08	.13348	.58360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	64.691	-.10911	-1.1886	-.69963	-2.6436	-.05147	.28503	.07049
Stddev	3.907	.25950	.7351	1.3061	1.3852	.84483	.88623	.02215
%RSD	6.0389	237.83	61.842	186.68	52.398	1641.3	310.93	31.423
#1	61.929	-.29260	-1.7084	.22391	-3.6231	-.64886	.91169	.05483
#2	67.453	.07438	-.66886	-1.6232	-1.6641	.54592	-.34163	.08615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 20:17:14 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.0164	.42050	-.86658	.08850	.18203
Stddev	.2826	.06439	1.0043	.10049	.05826
%RSD	9.3679	15.312	115.90	113.55	32.008
#1	-2.8166	.37497	-1.5767	.01744	.22322
#2	-3.2163	.46603	-.15641	.15956	.14083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43404.	13572.	556380.
Stddev	22.	248.	267.
%RSD	.05149	1.8267	.04790
#1	43389.	13747.	556190.
#2	43420.	13397.	556560.

Sample Name: S 710183-034-034-1/1 Acquired: 12/3/2007 20:20:31 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.2244	67719.	-4.0933	-2.0763	15.879	2.5582	671.10
Stddev	.1638	407.	2.8249	.0307	.048	.0606	1.37
%RSD	7.3623	.60066	69.012	1.4787	.30277	2.3686	.20446
#1	-2.1086	68006.	-2.0958	-2.0980	15.913	2.5153	672.07
#2	-2.3402	67431.	-6.0907	-2.0546	15.845	2.6010	670.13

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.9225	4.5144	460.97	99.79	243740.	481.20	673.3
Stddev	.0492	.1418	.54	1.26	929.	3.94	1.6
%RSD	1.6848	3.1415	.11633	1.262	.38101	.81932	.2372
#1	-2.9573	4.6146	461.35	100.7	244400.	478.41	674.4
#2	-2.8876	4.4141	460.59	98.90	243090.	483.99	672.2

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	467.61	5.2074	82.647	129.29	27.611	-.52484	-3.2758
Stddev	.88	.3814	3.339	.51	.415	1.1264	3.0470
%RSD	.18894	7.3243	4.0396	.39441	1.5026	214.61	93.016
#1	468.24	4.9377	85.007	128.93	27.317	-1.3213	-5.4304
#2	466.99	5.4771	80.286	129.65	27.904	.27161	-1.1212

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1173.4	-14.499	15.606	-29.635	10585.	.43676	480.13
Stddev	4.3	.377	.015	.794	19.	3.6664	.96
%RSD	.36357	2.5994	.09448	2.6801	.18160	839.45	.19902
#1	1176.4	-14.232	15.617	-30.196	10598.	3.0293	480.81
#2	1170.4	-14.765	15.596	-29.073	10571.	-2.1558	479.46

Sample Name: S 710183-034-034-1/1 Acquired: 12/3/2007 20:20:31 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	110.48
Stddev	.19
%RSD	.17622
#1	110.62
#2	110.34

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42995.	13315.	554190.
Stddev	44.	6.	1910.
%RSD	.10182	.04427	.34465
#1	42964.	13319.	552840.
#2	43026.	13311.	555550.

Sample Name: S 710183-035-035-1/1 Acquired: 12/3/2007 20:23:51 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3.2710**	**33606.**	**-4.4809**	**5.8765**	**50.645**	**2.4042**	**398.51**
Stddev	.3958	589.	1.6336	.5628	.061	.0098	4.17
%RSD	12.099	1.7513	36.458	9.5779	.12134	.40926	1.0452
#1	3.5509	34022.	-5.6361	5.4785	50.689	2.4112	401.45
#2	2.9912	33189.	-3.3258	6.2745	50.602	2.3973	395.56

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.5219**	**28.596**	**431.42**	**160.6**	**212050.**	**633.99**	**1017.**
Stddev	.1341	.364	2.47	2.0	4692.	21.83	20.
%RSD	5.3159	1.2721	.57308	1.263	2.2128	3.4435	1.967
#1	-2.6167	28.339	433.17	162.0	215370.	649.43	1031.
#2	-2.4271	28.853	429.67	159.2	208730.	618.55	1003.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2622.4**	**2.8431**	**66.729**	**88.142**	**21.117**	**.32273**	**-12.370**
Stddev	8.8	.5322	9.930	.369	1.949	.29057	1.146
%RSD	.33556	18.720	14.881	.41856	9.2309	90.035	9.2681
#1	2628.7	3.2194	73.751	88.403	19.739	.11727	-11.559
#2	2616.2	2.4668	59.708	87.881	22.496	.52819	-13.180

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**613.77**	**-14.273**	**11.551**	**-23.978**	**9876.9**	**2.7580**	**504.42**
Stddev	3.45	.111	.005	1.439	53.7	1.9826	1.85
%RSD	.56204	.77666	.04460	5.9995	.54406	71.886	.36758
#1	616.21	-14.195	11.547	-22.961	9914.9	4.1599	505.73
#2	611.33	-14.352	11.555	-24.995	9838.9	1.3561	503.11

Sample Name: S 710183-035-035-1/1 Acquired: 12/3/2007 20:23:51 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	124.76
Stddev	.81
%RSD	.64597
#1	124.19
#2	125.33

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43249.	13282.	551650.
Stddev	136.	180.	2244.
%RSD	.31458	1.3525	.40672
#1	43153.	13155.	550060.
#2	43345.	13409.	553230.

Sample Name: S 710183-036-036-1/1 Acquired: 12/3/2007 20:27:11 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.1743	24416.	-12.467	-1.1800	64.637	3.2309	2635.9
Stddev	.6217	911.	1.370	.0662	.014	.0441	99.3
%RSD	28.594	3.7321	10.988	5.6094	.02135	1.3648	3.7666
#1	-2.6139	23772.	-13.436	-1.1332	64.628	3.2621	2565.7
#2	-1.7347	25060.	-11.498	-1.2268	64.647	3.1997	2706.1

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.3946	20.419	502.30	133.5	247070.	306.15	1562.
Stddev	.5477	.094	.14	.1	8365.	23.96	53.
%RSD	22.873	.45813	.02884	.0708	3.3856	7.8274	3.400
#1	-2.0073	20.353	502.20	133.4	241150.	323.10	1524.
#2	-2.7819	20.486	502.40	133.6	252980.	289.21	1599.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	649.38	4.2681	89.930	89.833	28.193	.23336	-13.444
Stddev	.20	.4560	5.488	.747	1.438	1.2078	.193
%RSD	.03142	10.683	6.1021	.83098	5.1000	517.58	1.4359
#1	649.52	3.9457	86.050	89.305	29.210	1.0874	-13.307
#2	649.23	4.5905	93.811	90.361	27.177	-.62070	-13.580

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	927.55	-20.158	93.609	-27.442	12467.	1.9707	650.28
Stddev	5.59	.017	.004	2.513	29.	.4457	.38
%RSD	.60278	.08204	.00415	9.1579	.23565	22.617	.05814
#1	923.60	-20.170	93.612	-29.220	12488.	2.2859	650.54
#2	931.50	-20.146	93.606	-25.665	12447.	1.6555	650.01

Sample Name: S 710183-036-036-1/1 Acquired: 12/3/2007 20:27:11 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	151.31
Stddev	.49
%RSD	.32655
#1	151.66
#2	150.96

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43539.	14036.	561610.
Stddev	31.	330.	334.
%RSD	.07138	2.3480	.05953
#1	43561.	14269.	561850.
#2	43517.	13803.	561380.

Sample Name: S 710183-037-037-1/1 Acquired: 12/3/2007 20:30:31 Type: Unk
Method: TRACE(v2) Mode: CONC Cort. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.7931	59542.	-7.6912	-1.6155	42.698	2.5267	488.37
Stddev	.3694	806.	1.8071	.2577	.593	.0379	16.30
%RSD	20.601	1.3539	23.495	15.952	1.3893	1.5015	3.3380
#1	-2.0543	58972.	-8.9690	-1.4333	43.118	2.5535	476.84
#2	-1.5319	60112.	-6.4134	-1.7977	42.279	2.4998	499.89

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.6095	9.5421	555.55	119.2	253210.	305.64	621.8
Stddev	.3261	.2047	8.52	2.0	4181.	68.41	7.9
%RSD	12.497	2.1447	1.5331	1.710	1.6511	22.383	1.270
#1	-2.3789	9.3974	561.57	120.6	250260.	257.27	616.2
#2	-2.8401	9.6868	549.53	117.7	256170.	354.02	627.4

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	527.53	5.0123	69.000	79.620	27.495	-.79643	-2.5595
Stddev	7.63	.2007	3.102	.299	2.439	.09757	1.0209
%RSD	1.4466	4.0050	4.4953	.37553	8.8690	12.251	39.886
#1	532.92	4.8703	66.806	79.408	25.771	-.86542	-3.2814
#2	522.13	5.1542	71.193	79.831	29.219	-.72744	-1.8376

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1235.5	-11.484	52.595	-26.459	9440.1	2.6388	526.02
Stddev	25.7	.128	.859	.117	135.5	2.4290	8.32
%RSD	2.0810	1.1132	1.6340	.44176	1.4358	92.048	1.5811
#1	1253.6	-11.393	53.202	-26.542	9535.9	.92126	531.90
#2	1217.3	-11.574	51.987	-26.376	9344.2	4.3564	520.14

Sample Name: S 710183-037-037-1/1 Acquired: 12/3/2007 20:30:31 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	103.94
Stddev	.53
%RSD	.50708
#1	104.31
#2	103.57

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43588.	13777.	562160.
Stddev	91.	165.	6926.
%RSD	.20974	1.2002	1.2321
#1	43653.	13894.	557260.
#2	43524.	13660.	567060.

Sample Name: S 710183-038-038-1/1 Acquired: 12/3/2007 20:33:50 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08341	36906.	-4.3746	-.08534	64.509	2.3039	596.85
Stddev	.43356	68.	1.0524	.29684	.171	.0614	12.79
%RSD	519.81	.18477	24.057	347.83	.26476	2.6639	2.1430
#1	.38998	36954.	-3.6305	-.29524	64.388	2.2605	605.90
#2	-.22317	36857.	-5.1188	.12456	64.630	2.3473	587.81

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9016	25.464	436.78	147.4	195290.	739.65	1563.
Stddev	.0245	.048	1.31	1.5	453.	6.95	1.
%RSD	1.2892	.18952	.29950	1.033	.23184	.93925	.0362
#1	-1.8843	25.498	435.86	146.4	194970.	734.74	1562.
#2	-1.9189	25.430	437.71	148.5	195610.	744.56	1563.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1206.2	3.6629	70.619	95.504	33.212	.36263	-12.019
Stddev	1.0	.3086	21.583	.645	.555	.61755	1.122
%RSD	.08266	8.4255	30.563	.67587	1.6703	170.30	9.3345
#1	1205.4	3.8811	85.881	95.960	32.820	.79930	-12.812
#2	1206.9	3.4447	55.358	95.047	33.604	-.07405	-11.225

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	614.85	-12.902	74.688	-21.078	9386.6	1.5917	488.29
Stddev	2.27	1.052	.200	.917	26.1	1.7159	.05
%RSD	.36888	8.1521	.26832	4.3487	.27782	107.80	.01051
#1	613.25	-13.646	74.546	-21.726	9368.2	2.8051	488.25
#2	616.46	-12.159	74.829	-20.430	9405.0	.37839	488.33

Sample Name: S 710183-038-038-1/1 Acquired: 12/3/2007 20:33:50 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	**165.22**
Stddev	.48
%RSD	.28969
#1	165.56
#2	164.88

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43266.	13617.	560200.
Stddev	103.	50.	1480.
%RSD	.23794	.36525	.26425
#1	43194.	13652.	561250.
#2	43339.	13582.	559160.

Sample Name: S 710183-039-039-1/1 Acquired: 12/3/2007 20:37:11 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.6354**	**35611.**	**-11.784**	**-1.6269**	**21.069**	**2.2195**	**1280.9**
Stddev	.3431	930.	.936	.2340	1.655	.0947	26.5
%RSD	20.979	2.6125	7.9434	14.381	7.8563	4.2675	2.0652
#1	-1.8781	34953.	-12.446	-1.7923	22.239	2.2865	1262.2
#2	-1.3928	36268.	-11.122	-1.4615	19.898	2.1525	1299.6

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.5686**	**10.715**	**542.19**	**176.7**	**222860.**	**676.58**	**1438.**
Stddev	.1848	.874	39.59	1.3	5028.	63.37	38.
%RSD	11.780	8.1540	7.3021	.7262	2.2562	9.3662	2.654
#1	-1.4379	10.098	570.18	175.8	219310.	721.39	1411.
#2	-1.6992	11.333	514.19	177.6	226420.	631.77	1465.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**529.79**	**3.8603**	**108.31**	**89.219**	**191.15**	**-.98881**	**-8.5535**
Stddev	39.01	.3683	11.14	.403	1.71	.92792	2.0340
%RSD	7.3623	9.5396	10.283	.45171	.89407	93.843	23.780
#1	557.37	3.5999	116.19	88.934	189.94	-1.6449	-9.9918
#2	502.21	4.1207	100.44	89.504	192.36	-.33266	-7.1152

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**753.20**	**-14.041**	**29.918**	**-23.219**	**9783.8**	**3.7329**	**499.29**
Stddev	57.05	.249	2.286	2.409	512.4	2.2439	38.45
%RSD	7.5742	1.7737	7.6427	10.373	5.2371	60.111	7.7000
#1	793.54	-13.865	31.535	-21.516	10146.	5.3196	526.48
#2	712.86	-14.217	28.301	-24.923	9421.5	2.1462	472.11

Sample Name: S 710183-039-039-1/1 Acquired: 12/3/2007 20:37:11 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	91.999
Stddev	.665
%RSD	.72296
#1	92.470
#2	91.529

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42974.	13722.	527940.
Stddev	13.	268.	38553.
%RSD	.02937	1.9538	7.3025
#1	42965.	13912.	500680.
#2	42983.	13532.	555200.

Sample Name: S 710183-040-040-1/1 Acquired: 12/3/2007 20:40:30 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.4255**	**30192.**	**-7.4450**	**-3.2899**	**22.124**	**2.3160**	**1036.4**
Stddev	.4053	419.	.6371	.0908	.007	.0614	10.0
%RSD	28.430	1.3879	8.5569	2.7602	.03248	2.6491	.96728
#1	-1.1390	29896.	-6.9945	-3.2256	22.129	2.3594	1029.3
#2	-1.7121	30488.	-7.8954	-3.3541	22.119	2.2727	1043.5

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.0234**	**10.363**	**526.97**	**97.96**	**208750.**	**680.94**	**1187.**
Stddev	.1243	.111	.58	2.10	2471.	30.71	14.
%RSD	6.1438	1.0719	.10917	2.143	1.1836	4.5104	1.148
#1	-1.9355	10.285	527.38	96.48	207000.	659.23	1177.
#2	-2.1113	10.442	526.56	99.45	210490.	702.66	1196.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**489.20**	**3.4016**	**93.298**	**70.667**	**15.774**	**1.0874**	**-6.6682**
Stddev	.57	.0613	47.986	.333	2.521	.3338	.4301
%RSD	.11693	1.8022	51.433	.47105	15.982	30.695	6.4505
#1	489.61	3.4449	59.367	70.431	17.556	.85142	-6.9723
#2	488.80	3.3582	127.23	70.902	13.991	1.3235	-6.3640

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**766.95**	**-14.383**	**22.287**	**-24.469**	**9733.3**	**1.8753**	**498.45**
Stddev	.58	.144	.022	1.171	42.7	.2065	.58
%RSD	.07599	1.0002	.09986	4.7844	.43826	11.009	.11648
#1	766.54	-14.281	22.302	-25.297	9763.5	2.0213	498.04
#2	767.36	-14.485	22.271	-23.641	9703.1	1.7294	498.86

Sample Name: S 710183-040-040-1/1 Acquired: 12/3/2007 20:40:30 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	79.319
Stddev	.152
%RSD	.19191
#1	79.427
#2	79.211

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42806.	13360.	549030.
Stddev	70.	187.	89.
%RSD	.16251	1.4019	.01615
#1	42757.	13493.	549090.
#2	42855.	13228.	548960.

Sample Name: S 710183-041-041-1/1 Acquired: 12/3/2007 20:43:51 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.59433	25438.	-8.1141	-1.2943	34.137	3.1132	655.99
Stddev	.10388	355.	1.3252	.3657	.139	.0173	14.71
%RSD	17.479	1.3972	16.332	28.252	.40592	.55532	2.2418
#1	-.66778	25187.	-9.0512	-1.5529	34.235	3.1254	645.59
#2	-.52087	25690.	-7.1771	-1.0358	34.039	3.1010	666.39

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.1961	23.307	566.69	152.4	210520.	630.24	1646.
Stddev	.0537	.213	1.22	1.3	2530.	7.01	20.
%RSD	2.4450	.91269	.21459	.8317	1.2018	1.1122	1.204
#1	-2.1582	23.157	567.55	153.3	208730.	635.20	1632.
#2	-2.2341	23.457	565.83	151.5	212310.	625.28	1660.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1101.6	3.1301	53.207	100.59	32.979	2.0131	-11.481
Stddev	4.7	.1750	12.655	.13	1.442	.2569	.531
%RSD	.42771	5.5895	23.784	.12785	4.3718	12.762	4.6222
#1	1105.0	3.0064	44.258	100.68	33.998	1.8314	-11.106
#2	1098.3	3.2538	62.155	100.50	31.959	2.1947	-11.856

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	613.66	-20.551	15.889	-30.680	12931.	2.7765	575.89
Stddev	3.04	.413	.021	3.005	92.	.5932	1.53
%RSD	.49495	2.0115	.13021	9.7945	.71216	21.363	.26552
#1	615.81	-20.843	15.903	-32.804	12996.	3.1960	576.97
#2	611.51	-20.259	15.874	-28.555	12866.	2.3571	574.81

Sample Name: S 710183-041-041-1/1 Acquired: 12/3/2007 20:43:51 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	150.01
Stddev	.82
%RSD	.54738
#1	150.59
#2	149.43

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42707.	13398.	552480.
Stddev	61.	107.	1729.
%RSD	.14246	.79946	.31301
#1	42664.	13474.	551260.
#2	42750.	13322.	553710.

Sample Name: S 710183-042-042-1/1 Acquired: 12/3/2007 20:47:12 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4.3100**	**40400.**	**-4.8675**	**8.5715**	**51.807**	**2.5296**	**1019.1**
Stddev	.1285	175.	4.2573	.0794	.534	.0317	7.7
%RSD	2.9817	.43304	87.463	.92617	1.0302	1.2519	.75157
#1	4.2192	40524.	-1.8572	8.6277	52.185	2.5072	1024.6
#2	4.4009	40276.	-7.8779	8.5154	51.430	2.5519	1013.7

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.3149**	**32.020**	**479.07**	**141.7**	**207080.**	**744.04**	**1272.**
Stddev	.0805	.341	3.43	.2	924.	107.05	6.
%RSD	3.4797	1.0635	.71592	.1631	.44624	14.388	.5093
#1	-2.3718	31.779	481.50	141.8	207730.	668.35	1276.
#2	-2.2579	32.261	476.65	141.5	206420.	819.74	1267.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3067.8**	**3.3472**	**77.901**	**124.43**	**26.666**	**.38885**	**-15.347**
Stddev	27.7	.0006	12.516	.77	.353	2.0160	2.850
%RSD	.90284	.01677	16.066	.61623	1.3233	518.45	18.569
#1	3087.4	3.3468	86.751	124.97	26.416	-1.0367	-13.332
#2	3048.2	3.3476	69.051	123.89	26.915	1.8144	-17.363

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**750.92**	**-16.198**	**21.330**	**-23.948**	**10474.**	**2.0918**	**486.15**
Stddev	2.81	.015	.230	.202	32.	.6466	5.24
%RSD	.37376	.09145	1.0765	.84488	.30730	30.912	1.0773
#1	752.90	-16.187	21.493	-23.805	10496.	1.6346	489.85
#2	748.93	-16.208	21.168	-24.091	10451.	2.5491	482.45

Sample Name: S 710183-042-042-1/1 Acquired: 12/3/2007 20:47:12 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	106.96
Stddev	.49
%RSD	.45591
#1	106.62
#2	107.31

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42775.	13263.	548420.
Stddev	127.	77.	5901.
%RSD	.29628	.57773	1.0760
#1	42685.	13209.	544250.
#2	42864.	13317.	552590.

Sample Name: S 710183-043-043-1/1 Acquired: 12/3/2007 20:50:32 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.7400	27260.	-12.309	-2.3656	36.456	2.9232	835.82
Stddev	.2029	179.	1.811	.3739	.148	.0503	18.85
%RSD	11.659	.65798	14.711	15.805	.40665	1.7201	2.2551
#1	-1.8834	27133.	-13.589	-2.1013	36.561	2.8876	822.49
#2	-1.5965	27387.	-11.028	-2.6300	36.351	2.9587	849.14

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.5630	15.905	513.26	121.8	224990.	528.49	1328.
Stddev	.1407	.340	2.51	.7	1812.	4.88	9.
%RSD	5.4917	2.1407	.48943	.5878	.80521	.92293	.6843
#1	-2.4635	15.664	515.04	122.3	223710.	531.94	1321.
#2	-2.6626	16.146	511.49	121.3	226270.	525.04	1334.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	716.15	3.5031	41.830	94.133	19.834	-1.2549	-11.525
Stddev	3.51	.3965	14.006	.191	1.342	.2026	2.464
%RSD	.48978	11.318	33.484	.20305	6.7677	16.143	21.376
#1	718.63	3.7834	51.734	94.268	20.783	-1.3981	-13.267
#2	713.67	3.2227	31.926	93.997	18.885	-1.1116	-9.7833

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	629.64	-18.273	20.508	-29.159	11751.	.05644	538.08
Stddev	6.45	.523	.089	2.838	2.	.89380	2.25
%RSD	1.0252	2.8641	.43402	9.7346	.01575	1583.7	.41772
#1	634.20	-18.643	20.571	-31.166	11752.	.68845	539.66
#2	625.07	-17.903	20.445	-27.152	11750.	-.57557	536.49

Sample Name: S 710183-043-043-1/1 Acquired: 12/3/2007 20:50:32 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	146.57
Stddev	.18
%RSD	.12347
#1	146.70
#2	146.44

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42862.	13324.	550620.
Stddev	43.	225.	1725.
%RSD	.10103	1.6871	.31328
#1	42832.	13483.	549400.
#2	42893.	13165.	551840.

Sample Name: CCV Acquired: 12/3/2007 20:53:51 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	524.88	50624.	532.84	517.63	513.61	51.007	100400.
Stddev	3.78	1333.	2.60	.01	3.62	.360	2333.
%RSD	.72066	2.6327	.48850	.00161	.70512	.70636	2.3234
#1	527.55	49682.	534.68	517.64	516.17	51.262	98748.
#2	522.20	51567.	531.00	517.63	511.05	50.752	102050.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	522.18	515.28	500.71	522.3	49565.	25521.	F 99400.
Stddev	1.36	.76	4.39	1.0	1001.	433.	1937.
%RSD	.26016	.14711	.87600	.1848	2.0188	1.6984	1.949
#1	523.14	515.81	503.81	521.6	48857.	25215.	98030.
#2	521.22	514.74	497.61	523.0	50272.	25828.	100800.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							500.0
Range							10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	508.65	532.74	106940.	510.78	517.23	534.46	536.31
Stddev	3.98	1.85	1998.	1.35	.09	1.24	4.82
%RSD	.78235	.34719	1.8679	.26446	.01822	.23163	.89844
#1	511.46	534.05	105530.	511.74	517.30	535.34	539.72
#2	505.83	531.44	108350.	509.83	517.17	533.59	532.91
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 12/3/2007 20:53:51 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	535.87	527.32	510.98	526.67	512.93	523.89	516.67
Stddev	5.46	.24	1.50	3.55	4.07	1.85	3.77
%RSD	1.0182	.04582	.29300	.67392	.79406	.35220	.73003
#1	539.73	527.49	512.04	524.16	515.81	525.20	519.34
#2	532.01	527.15	509.92	529.18	510.05	522.59	514.01
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Zn
Units	ppb
Avg	522.91
Stddev	.85
%RSD	.16197
#1	523.51
#2	522.31
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42613.	13669.	551370.
Stddev	34.	173.	4145.
%RSD	.08044	1.2638	.75175
#1	42589.	13791.	548440.
#2	42637.	13547.	554310.

Sample Name: CCB Acquired: 12/3/2007 20:57:19 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.28685	16.430	-.93638	-11.207	.02140	.01492	12.834	.06539
Stddev	.16966	22.115	1.0462	.167	.01126	.01111	7.505	.01970
%RSD	59.144	134.60	111.73	1.4896	52.610	74.465	58.473	30.122
#1	.16689	.79294	-.19662	-11.325	.02936	.00706	18.141	.07932
#2	.40682	32.068	-1.6761	-11.089	.01344	.02277	7.5278	.05146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11355	.06937	-1.456	8.5160	-4.8666	F 13.53	.05616	.12236
Stddev	.09319	.00209	.011	1.8444	5.2569	.63	.03679	.15086
%RSD	82.069	3.0119	.7639	21.658	108.02	4.671	65.501	123.29
#1	.17944	.07085	-1.464	7.2118	-1.1494	13.98	.08218	.22904
#2	.04765	.06790	-1.448	9.8202	-8.5838	13.08	.03015	.01569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	115.21	-.06768	1.2607	-1.6579	-1.5921	.15342	.02420	.05488
Stddev	15.91	.13160	.3656	1.7003	3.1893	.08299	.91912	.01265
%RSD	13.810	194.45	29.002	102.56	200.32	54.097	3798.6	23.056
#1	103.96	-.16073	1.5192	-.45563	-3.8472	.09473	-.62572	.06383
#2	126.46	.02538	1.0021	-2.8602	.66308	.21211	.67411	.04593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 20:57:19 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.3174	.43656	-.50047	-.04238	.13575
Stddev	2.7515	.08591	2.3111	.04614	.03622
%RSD	118.73	19.679	461.78	108.87	26.684
#1	-4.2630	.49731	1.1337	-.07500	.11014
#2	-.37183	.37581	-2.1347	-.00975	.16136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43668.	13769.	561970.
Stddev	303.	151.	2306.
%RSD	.69383	1.0980	.41032
#1	43882.	13876.	563600.
#2	43454.	13662.	560340.

Sample Name: S 710183-044-044-1/1 Acquired: 12/3/2007 21:00:36 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.7293	31627.	-9.1787	-2.8766	22.830	2.6683	516.17
Stddev	.4728	532.	1.8591	.2876	.002	.0414	7.20
%RSD	27.344	1.6830	20.255	9.9993	.01061	1.5505	1.3956
#1	-2.0636	31251.	-7.8641	-3.0800	22.832	2.6390	511.08
#2	-1.3949	32003.	-10.493	-2.6732	22.828	2.6975	521.26

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9363	14.342	451.31	119.8	217030.	478.47	1002.
Stddev	.1659	.237	.87	.9	2365.	41.10	11.
%RSD	8.5689	1.6554	.19382	.7328	1.0899	8.5897	1.096
#1	-1.8190	14.510	451.93	119.1	215360.	449.41	994.3
#2	-2.0536	14.174	450.69	120.4	218700.	507.53	1010.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	573.36	3.6694	106.73	86.897	26.486	1.3902	-7.6642
Stddev	.30	.0825	6.13	.003	.222	.3355	.4204
%RSD	.05258	2.2482	5.7460	.00317	.83703	24.135	5.4849
#1	573.57	3.6111	102.39	86.895	26.643	1.6274	-7.9615
#2	573.15	3.7277	111.07	86.899	26.329	1.1529	-7.3670

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	767.75	-16.753	15.414	-28.348	10978.	.91435	524.60
Stddev	.93	.856	.074	.226	89.	.06726	.43
%RSD	.12112	5.1093	.48198	.79648	.81493	7.3556	.08250
#1	768.41	-17.358	15.466	-28.189	10915.	.96191	524.30
#2	767.10	-16.147	15.361	-28.508	11041.	.86679	524.91

Sample Name: S 710183-044-044-1/1 Acquired: 12/3/2007 21:00:36 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	119.92
Stddev	.55
%RSD	.46019
#1	120.31
#2	119.53

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43151.	13608.	556750.
Stddev	129.	109.	162.
%RSD	.29946	.80344	.02901
#1	43060.	13686.	556640.
#2	43243.	13531.	556870.

Sample Name: S 710183-045-045-1/1 Acquired: 12/3/2007 21:03:56 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.34569	23244.	-7.3878	-1.8168	22.533	2.5732	175.77
Stddev	.33642	365.	.8578	.2312	.050	.0179	5.76
%RSD	97.320	1.5690	11.612	12.724	.22013	.69501	3.2771
#1	-.58357	22986.	-7.9943	-1.6534	22.498	2.5605	171.70
#2	-.10780	23502.	-6.7812	-1.9803	22.568	2.5858	179.85

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.1075	23.015	500.77	165.7	213560.	274.79	1437.
Stddev	.0822	.127	.02	.7	1578.	42.80	15.
%RSD	3.8992	.55278	.00304	.4024	.73868	15.574	1.014
#1	-2.0494	23.105	500.78	165.3	212450.	305.05	1427.
#2	-2.1656	22.925	500.76	166.2	214680.	244.53	1447.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	903.50	2.4509	69.069	90.176	13.524	.29233	-9.1123
Stddev	1.15	.1208	14.056	.259	.483	2.1944	1.0300
%RSD	.12677	4.9268	20.351	.28682	3.5722	750.67	11.304
#1	902.69	2.5363	59.130	89.993	13.183	-1.2594	-9.8407
#2	904.31	2.3655	79.008	90.359	13.866	1.8440	-8.3840

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	601.82	-16.442	7.0663	-24.160	10666.	1.9432	513.55
Stddev	11.55	.804	.0381	.414	109.	1.1608	.68
%RSD	1.9191	4.8906	.53871	1.7143	1.0228	59.736	.13326
#1	593.66	-17.010	7.0394	-23.868	10589.	1.1224	513.06
#2	609.99	-15.873	7.0932	-24.453	10743.	2.7640	514.03

Sample Name: S 710183-045-045-1/1 Acquired: 12/3/2007 21:03:56 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	**132.20**
Stddev	.37
%RSD	.27621
#1	132.46
#2	131.94

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42993.	13443.	553740.
Stddev	26.	55.	983.
%RSD	.06042	.41052	.17754
#1	43011.	13482.	554430.
#2	42974.	13404.	553040.

Sample Name: S 710183-046-046-1/1 Acquired: 12/3/2007 21:07:16 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.3644**	**24495.**	**-5.6795**	**-2.2332**	**19.251**	**2.5121**	**556.45**
Stddev	.2874	383.	.5806	.4421	.137	.0041	4.10
%RSD	21.067	1.5639	10.223	19.796	.71068	.16486	.73594
#1	-1.1612	24766.	-5.2690	-1.9206	19.348	2.5150	559.35
#2	-1.5677	24224.	-6.0901	-2.5458	19.154	2.5091	553.56

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.4358**	**11.339**	**546.04**	**125.6**	**244970.**	**522.02**	**1081.**
Stddev	.1966	.502	2.33	1.9	2565.	12.19	18.
%RSD	8.0693	4.4268	.42756	1.506	1.0470	2.3345	1.651
#1	-2.5748	10.984	547.69	124.2	246780.	530.64	1093.
#2	-2.2969	11.693	544.38	126.9	243160.	513.41	1068.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**604.33**	**4.4001**	**72.472**	**76.291**	**25.802**	**1.4131**	**-7.7650**
Stddev	3.39	.0814	2.931	.039	.690	.2150	4.7532
%RSD	.56015	1.8508	4.0441	.05082	2.6760	15.217	61.214
#1	606.72	4.3425	74.545	76.319	26.290	1.5651	-4.4040
#2	601.94	4.4577	70.400	76.264	25.314	1.2610	-11.126

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**632.18**	**-13.990**	**12.865**	**-23.436**	**10709.**	**2.5460**	**567.51**
Stddev	8.61	.723	.051	.975	21.	1.7658	3.16
%RSD	1.3626	5.1671	.39419	4.1603	.19178	69.358	.55710
#1	638.27	-14.501	12.901	-22.747	10724.	3.7946	569.75
#2	626.09	-13.478	12.829	-24.126	10695.	1.2973	565.28

Sample Name: S 710183-046-046-1/1 Acquired: 12/3/2007 21:07:16 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	95.678
Stddev	.002
%RSD	.00255
#1	95.680
#2	95.677

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42757.	13209.	550660.
Stddev	62.	111.	232.
%RSD	.14551	.83949	.04213
#1	42801.	13130.	550500.
#2	42713.	13287.	550830.

Sample Name: CCV Acquired: 12/3/2007 21:33:52 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	530.63	53675.	543.95	525.21	507.26	52.183
Stddev	2.61	281.	2.63	.42	4.38	.272
%RSD	.49173	.52319	.48323	.07970	.86427	.52168
#1	528.78	53873.	542.09	524.91	510.36	51.990
#2	532.47	53476.	545.81	525.50	504.16	52.375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	105200.	526.44	519.69	512.83	527.3	51792.
Stddev	440.	.31	.22	4.14	3.3	203.
%RSD	.41813	.05808	.04249	.80807	.6310	.39166
#1	105520.	526.66	519.54	509.90	525.0	51936.
#2	104890.	526.22	519.85	515.76	529.7	51649.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26801.	F 104500.	506.42	537.05	109380.	515.12
Stddev	143.	621.	1.65	.78	423.	.65
%RSD	.53535	.5943	.32526	.14531	.38695	.12607
#1	26903.	105000.	505.26	536.50	109680.	514.66
#2	26700.	104100.	507.59	537.60	109080.	515.58
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 21:33:52 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	527.11	537.80	537.36	538.88	529.79	513.62
Stddev	.61	.11	2.55	4.88	.42	5.36
%RSD	.11654	.01989	.47400	.90582	.07933	1.0433
#1	527.54	537.87	539.16	535.43	530.09	509.83
#2	526.67	537.72	535.56	542.33	529.50	517.40
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	527.01	523.91	531.64	521.96	530.69
Stddev	3.94	3.59	1.52	2.35	.29
%RSD	.74831	.68485	.28607	.45034	.05461
#1	529.80	521.38	532.71	520.30	530.90
#2	524.22	526.45	530.56	523.62	530.49
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	41696.	12921.	544070.
Stddev	86.	69.	1832.
%RSD	.20548	.53553	.33665
#1	41756.	12872.	545360.
#2	41635.	12970.	542770.

Sample Name: CCB Acquired: 12/3/2007 21:37:20 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.16264	2.6812	.08969	-11.903	.00239	.02598	19.267	.08183
Stddev	.29282	16.258	.14644	.675	.00991	.01183	7.120	.07002
%RSD	180.04	606.37	163.27	5.6676	413.92	45.556	36.956	85.562
#1	.36969	14.177	.19323	-12.380	.00940	.03435	14.232	.13135
#2	-.04441	-8.8149	-.01386	-11.426	-.00461	.01761	24.302	.03232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.27117	.08391	-1.224	18.674	-.26958	F 14.37	.10267	.21658
Stddev	.09850	.09907	.130	9.039	78.755	.06	.02281	.03672
%RSD	36.323	118.07	10.62	48.406	29214.	.3946	22.217	16.953
#1	.20152	.01386	-1.316	12.282	-55.958	14.33	.08654	.24255
#2	.34082	.15396	-1.133	25.065	55.419	14.41	.11880	.19062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	79.683	-.28895	-.68585	.33756	-1.4724	.32257	.09888	.06607
Stddev	18.286	.32823	1.4626	.53480	.2019	.46828	.47276	.00192
%RSD	22.948	113.59	213.25	158.43	13.716	145.17	478.12	2.8991
#1	92.612	-.05686	-1.7200	-.04060	-1.6152	-.00856	-.23541	.06742
#2	66.753	-.52104	.34834	.71572	-1.3296	.65369	.43317	.06471
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 21:37:20 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.4818	.52919	-.06535	-.00501	.15157
Stddev	2.8212	.03100	2.2699	.24348	.20257
%RSD	190.39	5.8578	3473.3	4863.2	133.64
#1	-3.4767	.55111	1.5397	-.17718	.00834
#2	.51305	.50727	-1.6704	.16716	.29481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42969.	13249.	550440.
Stddev	49.	115.	772.
%RSD	.11399	.86928	.14026
#1	42935.	13330.	549890.
#2	43004.	13167.	550980.

Metals Preparation & Sample Description Log

Prep: 200.7 / 3005A / 3020A / 3050B / 3010A/ ILC03.1 / ILM04.1 / ILM05.3 / ILM05.4

Date: 10-29-2007 Batch No.: 202-39

Analyst: DJS Comments: MOD BLOCK DIGESTION (SOIL)

Reviewed by: RA Date: 11-21-07 Spike Witness: Pep. Seq: 101359

	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, Blk.	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
1	BLK	039		1.00	100	S				Clear	—
2	BKS	039									—
3	710166	039	039-1/1	1.16		SOIL	Brown	Yellow	Medium		—
4		045		1.20							
5		MSD	✓	1.24							
6		040	040-1/1	1.21							
7		041	041-1/1	1.24							
8		042	042-1/1	1.23							
9		043	043-1/1	1.25							
10		044	044-1/1	1.14							
11		045	045-1/1	1.16							
12		046	046-1/1	1.18							
13		047	047-1/1	1.17							
14		048	048-1/1	1.21							
15		049	049-1/1	1.17							
16		050	050-1/1	1.19							
17		051	051-1/1	1.24							
18	✓	052	052-1/1	1.23							
19	710183	001	001-1/1	1.18							
20		002	002-1/1	1.25							
21		003	003-1/1	1.17							
22		004	004-1/1	1.21							
23		005	005-1/1	1.25							
24	✓	006	006-1/1	1.23	✓	✓	✓	✓	✓	✓	✓

LCS ID/ Amt. Added (ml ,g) 0.2 ml (40827 40828 40829)	HNO3(1+1) ID: GP-057-165-03
Spiking ID / Amt. Added (ml) 0.2 ml (40827 40828 40829)	HNO3(conc) ID: GP-129-11-08
10 ml 1:1 HNO3, 10 ml HNO3 conc, 7 ml H2O2, 10 ml HCL conc	HCl(conc) ID: GP-129-11-06
Temperature C: 94°C	HCl(1+1) ID: —
	Peroxide ID: GP-129-10-12

Metals Preparation & Sample Description Log

Prep: 200.7 / 3005A / 3020A / 3050B / 3010A / ILC03.1 / ILM04.1 / ILM05.3 / ILM05.4

Date: 10-30-2007 Batch No.: 202 - 45

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

Reviewed by: RA Date: 11-21-07 Spike Witness: HS Pep. Seq: 101258

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	45		1.00	100	S				clear	—
2 BKS	45									—
3 710183	047	047-1	1.15		SOIL	Brown	Yellow	Medium		—
4	MS		1.20							
5	MSD	✓	1.24							
6	048	048-1	1.16							
7	049	049-1	1.26							
8	050	050-1	1.14							
9	051	051-1	1.24							
10	052	052-1	1.22							
11	053	053-1	1.18							
12	054	054-1	1.25							
13	055	055-1	1.17							
14 ✓	056	056-1	1.25			✓				
15 710179	001	001-1	1.36			Gray				
16 ✓	002	002-1	1.48			✓				
17 710199	001	001-1	1.23			Brown				
18	002	002-1	1.20							
19	003	003-1	1.23							
20	004	004-1	1.18							
21	005	005-1	1.28							
22	006	006-1	1.19							
23	007	007-1	1.15							
24 ✓	008	008-1	1.20	✓	✓	✓	✓	DS	1.2-2.0 ✓	✓

LCS ID/ Amt. Added (ml ,g): 0.2 ml (H0827, H0828, H0829)	HNO3(1+1) ID: GP-057-164-06
Spiking ID / Amt. Added (ml): 0.2 ml (H0827 H0828 H0829)	HNO3(conc) ID: GD-129-11-08
1.0 ml 1:1 HNO_3 10 ml HNO_3 conc 7 ml H_2O 10 ml HCl conc	HCl(conc) ID: GD-129-11-06
Temperature C: 94°C	HCl(1+1) ID: —
	Peroxide ID: GP-129-10-12

GPL Laboratories, LLLP

Metals Preparation & Sample Description Log

Prep: 200.7 / 3005A / 3020A / 3050B / 3010A/ ILC03.1 / ILM04.1 / ILM05.3 / ILM05.4

Batch No.: 202043

Date: 10-30-07 Comments: MOD BLOCK DIGESTION (Cont)

Analyst: MJ

Reviewed by: [illegible] Date: 11-18-07 Spike Witness: MJ Pep. Seq: 101683

	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	043		1.00	100	S				Clear	–
2	BKS	043		1.00							–
3	710183	027	-027-i	1.20		Soil	Brown	Yellow	Hard		
4		MI		1.25							
5		MSD		1.28							
6		028	-028-i	1.18							
7		-029	-029-i	1.13							
8		030	-030-i	1.17							
9		031	-031-i	1.27							
10		032	-032-i	1.23							
11		033	-033-i	1.13							
12		034	-034-i	1.21							
13		035	-035-i	1.19							
14		036	-036-i	1.21							
15		037	-037-i	1.18							
16		038	-038-i	1.13							
17		039	-039-i	1.20							
18		040	-040-i	1.17							
19		041	-041-i	1.26							
20		042	-042-i	1.19							
21		043	-043-i	1.20							
22		044	-044-i	1.30							
23		045	-045-i	1.13							
24		046	-046-i	1.18							

LCS ID/ Amt. Added (ml ,g): 0.9 ml (40827, 40828, 40829)

Spiking ID / Amt. Added (ml): 0.9 ml (40827, 40828, 40829)

Temperature C: 94°

HNO3(1+1) ID: 057-164-03

HNO3(conc) ID: 129-11-08

HCl(conc) ID: 129-11-06

HCl(1+1) ID: –

Peroxide ID: 129-10-12

Metals Preparation & Sample Description Log

Prep: 200.7 / 3005A / 3020A / (3050B) / 3010A / ILC03.1 / ILM04.1 / ILM05.3 / ILM05.4

Date: 10-29-2007 Batch No.: 202-41

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

Reviewed by: [illegible] Date: 11-18-07 Spike Witness: [illegible] Pep. Seq: 101469

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, Blc.	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
1 BLK	041		1.00	100	S				Clear	—
2 BKS	041									—
3 710183	007	007-1/1	1.19		SOIL	Brown	Yellow	Medium		—
4	MS		1.24							
5	MSD		1.27							
6	008	008-1/1	1.22							
7	009	009-1/1	1.20							
8	010	010-1/1	1.21							
9	011	011-1/1	1.24							
10	012	012-1/1	1.18							
11	013	013-1/1	1.17							
12	014	014-1/1	1.20							
13	015	015-1/1	1.28							
14	016	016-1/1	1.23							
15	017	017-1/1	1.24							
16	018	018-1/1	1.17							
17	019	019-1/1	1.16							
18	020	020-1/1	1.18							
19	021	021-1/1	1.20							
20	022	022-1/1	1.16							
21	023	023-1/1	1.17							
22	024	024-1/1	1.21							
23	025	025-1/1	1.27							
24	026	026-1/1	1.17					D.S.	10-29-07	

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

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

10 ml 1:1 HNO_3, 10 ml HNO_3 conc, 7 ml H_2O_2, 10 ml HCL conc

Temperature C: 94°C

HNO3(1+1) ID: GP-057-164-03

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

HCl(conc) ID: GP-129-11-06

HCl(1+1) ID: —

Peroxide ID: GP-129-10-12