

November 29, 2007

Ms. Penny Bassett
Brown and Caldwell
3264 Goni Road, Suite 153
Carson City, NV 89706

Dear Ms. Bassett:

Enclosed is the quality assurance review of the analytical data for the analyses of the soil samples that were collected on August 14 and 15, 2007, in association with the ARCO Yerington Mine Site. The samples were analyzed for radium-226 and radium-228.

Based on this quality assurance review, qualification of data was not warranted.

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

Sincerely,



Konstadina Vlahogiani, M.S.
Senior Quality Assurance Chemist III/
Project Manager

KV/RJV:hm
Enc.

Concurred by:



Rock J. Vitale, CEAC, CPC
Technical Director of Chemistry/
Principal

**QUALITY ASSURANCE REVIEW
OF THE SOIL SAMPLES COLLECTED AT THE
ARCO YERINGTON MINE SITE
ON AUGUST 14 AND 15, 2007**

November 29, 2007

Prepared for:

ATLANTIC RICHFIELD COMPANY
28100 Torch Parkway
Warrenville, IL 60555

Prepared by:

ENVIRONMENTAL STANDARDS, INC.
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Issued to:

BROWN AND CALDWELL
3264 Goni Road, Suite 153
Carson City, NV 89706

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1.0 Introduction

This quality assurance (QA) review is based upon a rigorous examination of all data generated from the analyses of the soil samples that were collected by Brown and Caldwell on August 14 and 15, 2007, in association with the ARCO Yerington Mine Site. The samples included in this QA review are specified on Table 1.

This review has been performed with guidance from the "National Functional Guidelines for Inorganic Data Review" (US EPA, 2/94). This document is not entirely applicable to the type of analyses and analytical protocols performed on the samples evaluated in this QA review, but it has been used with professional judgment to aid the data reviewer in the interpretation of the QC analysis results and in the overall evaluation of the sample data deliverables. It should also be noted that results affected by blank contamination will be designated with a "UJ" qualifier (not the "U" qualifier typically used when following the National Functional Guidelines) in order to be consistent with historical project validation protocols and the current project database.

The reported analytical results are presented as a summary of the data in Section 2. Data were examined to determine the usability of the analytical results and the compliance relative to the requirements specified in the published analytical methods, the Quality Assurance Project Plan (QAPjP) for the Atlantic Richfield Company Yerington Mine Site, Revision 1 (May 2007), and the Technical Requirements For Environmental Laboratory Analytical Services BP Global Contract Lab Network (GCLN) (5/22/02, Revision 08). Qualifier codes have been placed next to results to enable the data user to quickly assess the qualitative and/or quantitative reliability of any result. This critical QA review identifies data quality issues for specific samples and specific evaluation criteria. The data qualifications allow the data's end-user to best understand the usability of the analytical results. Data not qualified in this report should be considered valid based on the QC criteria that have been reviewed. Details of this QA review are presented in Section 1 of this report. This report was prepared to provide a critical review of the laboratory analyses and reported analytical results. Rigorous QA reviews of laboratory-generated data routinely identify various problems associated with analytical measurements, even from the most experienced and capable laboratories.

TABLE 1

SAMPLES INCLUDED IN THIS QUALITY ASSURANCE REVIEW

Field Sample Identification	Laboratory Sample Identification	Report Number	Matrix	Date Sample Collected	Parameters Examined
BGS-A2-59S	J7H240308-1	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-59S-D (Laboratory Duplicate)	J7H240308-1D	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-59D	J7H240308-2	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-58S	J7H240308-3	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-58D	J7H240308-4	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-57S	J7H240308-5	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-57D	J7H240308-6	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-60S	J7H240308-7	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-60D	J7H240308-8	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-56S	J7H240308-9	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-56D	J7H240308-10	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-49S	J7H240308-11	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-49D	J7H240308-12	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-50S	J7H240308-13	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-50D	J7H240308-14	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-48S	J7H240308-15	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-48D	J7H240308-16	36805	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-51S	J7H240331-1	36846	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-51S-D (Laboratory Duplicate)	J7H240331-1D	36846	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-51D-1	J7H240331-2	36846	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-51D-2 (Field Duplicate of BGS-A2-51D-1)	J7H240331-3	36846	Soil	8/14/07	²²⁶ Ra, ²²⁸ Ra
BGS-A1-14S	J7H240331-4	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A1-14D	J7H240331-5	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A1-05S	J7H240331-6	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra

TABLE 1 (Cont.)

Field Sample Identification	Laboratory Sample Identification	Report Number	Matrix	Date Sample Collected	Parameters Examined
BGS-A1-05D	J7H240331-7	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A1-02S	J7H240331-8	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A1-02D	J7H240331-9	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A1-06S	J7H240331-10	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A1-06D	J7H240331-11	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-53S	J7H240331-12	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra
BGS-A2-53D	J7H240331-13	36846	Soil	8/15/07	²²⁶ Ra, ²²⁸ Ra

NOTES:

²²⁶Ra - Radium-226 by STL SOP RICH-RC-5013/5017 (based on US EPA Method 901.1).

²²⁸Ra - Radium-228 by STL SOP RICH-RC-5013/5017 (based on US EPA Method 901.1).

2.0 Findings

Complete support documentation for this radiological analysis QA review is presented in Section 8.0 of this report.

Radium-226/Radium-228 Analysis

Thirty-one samples were analyzed for radium-226 and radium-228 by STL SOP RICH-RC-5013/5017 (based on US EPA Method 901.1). The findings offered in this report for this fraction are based on the items on the following table.

Item Reviewed	Acceptable	Acceptable With Discussion	Acceptable With Qualification	Not Acceptable
Holding Times	√			
Blank Results	√			
LCS Recoveries	√			
Laboratory Duplicate Precision	√			
Field Duplicate Precision	√			
Efficiency Calibration Check	√			
Background Check	√			
Full Width at the Half Maximum	√			
Sample Preparation	√			
Quantitation of Results	√			
Evaluation of Raw Data	√			

No findings were observed for the radium-226 and radium-228 fraction.

3.0 Qualifier Summary Tables

Radium-226/Radium-228 Analysis

Analyte	Report Number	Sample	Validation Qualifier	Reason for Qualification
Qualification of Data Was Not Warranted				

4.0 Overall Assessment

Based on this quality assurance review, qualification of data was not warranted.

5.0 Radiological Data Qualifiers and Valid Reason Codes

Radiological Data Qualifiers

- U Analyte not detected at the detection limit concentration.
- J Reported value is an estimated concentration.
- UJ Analyte not detected at an estimated detection limit concentration.
- R These data were rejected and were not used for any purposes.
- UR The analyte was not detected. The detection limit is unreliable and may be representative of a false negative. These data were rejected and are not usable for any purpose.

Valid Reason Codes

- 1 Holding time violation
- 2 Method blank contamination
- 3 Surrogate recovery
- 4 Matrix spike/matrix spike duplicate recovery
- 5 Matrix spike/matrix spike duplicate precision outside limits
- 6 Laboratory control sample recovery
- 7 Field blank contamination
- 8 Field duplicate precision outside limits
- 9 Other deficiencies (including cooler temperature)
- A Absence of supporting QC
- S ICV, CCV or column performance check problem
- Y Initial and continuing calibration blank problem
- M Interference check samples problem
- O Post-digestion spike outside of 85-115%
- F MSA correlation coefficient <0.995, or MSA not done
- G Serial dilution problem
- K DFTPP or BFB tuning problem
- Q Initial calibration problem
- X Internal standard recovery problem
- V Second source standard calibration verification problem
- L Low bias
- Z Retention time problem
- N Counting time error (radionuclide chemistry)
- W Detector instability (radionuclide chemistry)
- C Co-elution of compounds
- E Value exceeds linear calibration range
- I Interferences present during analysis
- T Trace level compound, poor quantitation
- P 1C/2C precision outside of limits
- B LCS/LCSD precision outside limits
- D Lab Dup/Rep precision outside limits
- H High bias

6.0 Signatures

Report prepared by:



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Project Manager

Report reviewed by:



Thomas H. Weinmann
Senior Quality Assurance Chemist I

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Date: 11/29/07



7.0 ANALYTICAL RESULTS

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2010	9J5K2210
Field Sample	BGS-A2-49D	BGS-A2-50S
Collect Date	8/14/2007 11:45:00 AM	8/14/2007 12:30:00 PM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	1.25		0.0456	0	0.16	1.07		0.0337	0	0.14
	RA-228	RADIUM-228	PCI/G	1.31		0.086	0	0.21	0.975		0.0608	0	0.16

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2310	9J5K2410
Field Sample	BGS-A2-50D	BGS-A2-48S
Collect Date	8/14/2007 12:30:00 PM	8/14/2007 2:00:00 PM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	1.06		0.0407	0	0.14	1.18		0.038	0	0.16
	RA-228	RADIUM-228	PCI/G	0.95		0.0819	0	0.17	1.07		0.0733	0	0.17

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2510	9J5K2G10
Field Sample	BGS-A2-48D	BGS-A2-59S
Collect Date	8/14/2007 2:00:00 PM	8/14/2007 8:00:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	0.697		0.0381	0	0.1	0.764		0.0378	0	0.11
	RA-228	RADIUM-228	PCI/G	0.754		0.075	0	0.14	0.839		0.0749	0	0.16

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2H10	9J5K2J10
Field Sample	BGS-A2-59D	BGS-A2-58S
Collect Date	8/14/2007 8:00:00 AM	8/14/2007 8:30:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	0.903		0.0354	0	0.12	1.06		0.0379	0	0.14
	RA-228	RADIUM-228	PCI/G	0.743		0.0745	0	0.14	1.17		0.0713	0	0.18

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2K10	9J5K2L10
Field Sample	BGS-A2-58D	BGS-A2-57S
Collect Date	8/14/2007 8:30:00 AM	8/14/2007 9:15:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	0.96		0.0326	0	0.13	0.792		0.0275	0	0.1
	RA-228	RADIUM-228	PCI/G	1.03		0.0611	0	0.17	0.801		0.0578	0	0.14

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2N10	9J5K2P10
Field Sample	BGS-A2-57D	BGS-A2-60S
Collect Date	8/14/2007 9:15:00 AM	8/14/2007 10:15:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	0.926		0.0277	0	0.12	0.797		0.0457	0	0.12
	RA-228	RADIUM-228	PCI/G	0.741		0.0548	0	0.15	0.862		0.0857	0	0.17

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2Q10	9J5K2R10
Field Sample	BGS-A2-60D	BGS-A2-56S
Collect Date	8/14/2007 10:15:00 AM	8/14/2007 10:45:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	0.775		0.0261	0	0.11	1.07		0.0282	0	0.14
	RA-228	RADIUM-228	PCI/G	0.788		0.0517	0	0.15	1.28	U	0.139	0	0.2

**Arco - Yerington
SDG: 36805**

Lab Sample	9J5K2V10	9J5K2X10
Field Sample	BGS-A2-56D	BGS-A2-49S
Collect Date	8/14/2007 10:45:00 AM	8/14/2007 11:45:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226	PCI/G	0.802		0.0445	0	0.12	1.19		0.0441	0	0.16
	RA-228	RADIUM-228	PCI/G	0.828		0.0823	0	0.15	1.36		0.0871	0	0.22

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K4210	9J5K4410
Field Sample	BGS-A1-02S	BGS-A1-02D
Collect Date	8/15/2007 9:45:00 AM	8/15/2007 9:45:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	1.23		0.0373	0	0.16	1.28		0.0308	0	0.16
	RA-228	RADIUM-228		PCI/G	1.41		0.0759	0	0.24	1.5		0.0617	0	0.23

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K4610	9J5K4G10
Field Sample	BGS-A1-06S	BGS-A2-51S
Collect Date	8/15/2007 10:45:00 AM	8/14/2007 3:00:00 PM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	0.871		0.037	0	0.12	0.986		0.0362	0	0.13
	RA-228	RADIUM-228		PCI/G	0.96		0.0744	0	0.16	0.844		0.0718	0	0.15

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K4J10	9J5K4K10
Field Sample	BGS-A2-51D-1	BGS-A2-51D-2
Collect Date	8/14/2007 3:00:00 PM	8/14/2007 3:00:00 PM
Type	N	FD
Parent		BGS-A2-51D-1

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	0.982		0.0408	0	0.13	0.876		0.0359	0	0.12
	RA-228	RADIUM-228		PCI/G	0.874		0.086	0	0.15	0.89		0.0682	0	0.14

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K4M10	9J5K4N10
Field Sample	BGS-A1-14S	BGS-A1-14D
Collect Date	8/15/2007 7:30:00 AM	8/15/2007 7:30:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	1.1		0.0424	0	0.15	1.48		0.0383	0	0.19
	RA-228	RADIUM-228		PCI/G	1		0.0822	0	0.18	1.41		0.0692	0	0.23

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K4V10	9J5K4X10
Field Sample	BGS-A1-05S	BGS-A1-05D
Collect Date	8/15/2007 8:30:00 AM	8/15/2007 8:30:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	0.929		0.0302	0	0.12	0.831		0.0442	0	0.12
	RA-228	RADIUM-228		PCI/G	0.963		0.0578	0	0.18	0.941		0.0905	0	0.17

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K5910	9J5K5A10
Field Sample	BGS-A2-54S	BGS-A1-06D
Collect Date	8/15/2007 1:15:00 PM	8/15/2007 10:45:00 AM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	1.13		0.0352	0	0.15	0.901		0.035	0	0.12
	RA-228	RADIUM-228		PCI/G	1.51		0.0695	0	0.26	1.01		0.0656	0	0.17

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K5K10	9J5K5M10
Field Sample	BGS-A2-53S	BGS-A2-53D
Collect Date	8/15/2007 12:30:00 PM	8/15/2007 12:30:00 PM
Type	N	N
Parent		

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	1.9		0.0335	0	0.24	2.43		0.0547	0	0.31
	RA-228	RADIUM-228		PCI/G	1.73		0.062	0	0.31	1.73		0.109	0	0.27

**Arco - Yerington
SDG: 36846**

Lab Sample	9J5K6C10
Field Sample	BGS-A2-54D
Collect Date	8/15/2007 1:15:00 PM
Type	N
Parent	

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert
E901.1	RA-226	RADIUM-226		PCI/G	1.38		0.0297	0	0.18
	RA-228	RADIUM-228		PCI/G	1.68		0.0562	0	0.26

8.0 SUPPORTING DOCUMENTATION

Analytical Data Package Prepared For

Brown and Caldwell

Radiochemical Analysis By

TAL Richland

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: STLR

Data Package Contains _____ Pages

Report No.: 36805

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
35711		BGS-A2-48D	J7H240308-16	J5K251AA	9J5K2510	7241626
		BGS-A2-48S	J7H240308-15	J5K241AA	9J5K2410	7241626
		BGS-A2-49D	J7H240308-12	J5K201AA	9J5K2010	7241626
		BGS-A2-49S	J7H240308-11	J5K2X1AA	9J5K2X10	7241626
		BGS-A2-50D	J7H240308-14	J5K231AA	9J5K2310	7241626
		BGS-A2-50S	J7H240308-13	J5K221AA	9J5K2210	7241626
		BGS-A2-56D	J7H240308-10	J5K2V1AA	9J5K2V10	7241626
		BGS-A2-56S	J7H240308-9	J5K2R1AA	9J5K2R10	7241626
		BGS-A2-57D	J7H240308-6	J5K2N1AA	9J5K2N10	7241626
		BGS-A2-57S	J7H240308-5	J5K2L1AA	9J5K2L10	7241626
		BGS-A2-58D	J7H240308-4	J5K2K1AA	9J5K2K10	7241626
		BGS-A2-58S	J7H240308-3	J5K2J1AA	9J5K2J10	7241626
		BGS-A2-59D	J7H240308-2	J5K2H1AA	9J5K2H10	7241626
		BGS-A2-59S	J7H240308-1	J5K2G1AA	9J5K2G10	7241626
		BGS-A2-60D	J7H240308-8	J5K2Q1AA	9J5K2Q10	7241626
		BGS-A2-60S	J7H240308-7	J5K2P1AA	9J5K2P10	7241626

TestAmerica

Certificate of Analysis

THE LEADER IN ENVIRONMENTAL TESTING

September 25, 2007

Brown & Caldwell
2701 Prospect Park Drive
Rancho Cordova, CA 95670

Attention: Penny Bassett

Date Received at Lab	:	August 23, 2007
Project Name	:	Yerington Mine Soils
Project Number	:	132039
Enfos Number	:	01KF-0109
PO Number	:	129682.001
Sample Type	:	Sixteen (16) Soil Samples
SDG Number	:	35711

CASE NARRATIVE

I. Introduction

On August 23, 2007, sixteen soil samples were received at the TestAmerica Laboratory Richland (TALR) laboratory for radiochemical analysis. Upon receipt, the samples were assigned TALR identification numbers as described on the cover page of the Analytical Data Package report form. The samples were assigned to Lot Number J7H240308.

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information; analytical results and the appropriate associated statistical uncertainties.

The analysis requested was:

Gamma
Gamma by method STL RICH-RC-5013/5017

IV. Quality Control

The analytical result for each analysis performed includes a minimum of one laboratory control sample (LCS), and one reagent blank sample analysis. Any exceptions have been noted in the "Comments" section.

V. Comments

Gamma

Gamma by method STL RICH-RC-5013/5017:

The LCS, batch blank, sample and sample duplicate results are within analytical requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:



Sherry A. Adam
Project Manager

Konstadina Vlahogiani

From: Jordan, Erika [Erika.Jordan@testamericainc.com]
Sent: Tuesday, November 27, 2007 1:45 PM
To: Konstadina Vlahogiani
Cc: Kocsis, Susie; Bassett, Penny; Kelly, Pam
Subject: RE: Soils Yerington report nos. 36846 and 36805 (Level IV)

The response to questions 1, 2 and 3 are as follows: Backgrounds are controlled to sigma limits only, actions and not founds. An above is acceptable. Recolutions are controlled to sigma limits only so an above is within limits.

Response to question 4: We looked at the data and found that Ra-228DA was not a detect by our peak identification criteria. The result reported is based on the net counts in the appropriate region of interest, however if one looks at the rejected peak report one finds that two of the supporting lines were not found. The criteria for peak identification is 80% for the "% abundances found." The analyte in question achieved only 66% and thus was classified as a non-detect.

Unless you have questions regarding the above responses, I think that covers all of your current outstanding issues. Correct?

So.....the only thing you need now is the current data that is due. The waters have just been completed by Sherryl and she is working on the air monitoring filters as I type. Hopefully it will all go out today. I think there is just one filter Event that is still processing in the lab....Event 163. The Thorium is done....the Radiums look just about done and the Alpha looks like it will go to the count room soon. I am trying to get an estimated completion date and I will get back to you soon.

Please let me know if there is anything outstanding or otherwise that you need.

Thank you for your patience with us. I am trying hard to get us back on track. So please don't be shy about asking for anything or voicing a concern.

Have a great day!
Erika

From: Konstadina Vlahogiani [mailto:dvlahogi@envstd.com]
Sent: Monday, November 19, 2007 8:07 AM
To: Jordan, Erika
Cc: Kocsis, Susie; Bassett, Penny
Subject: FW: Soils Yerington report nos. 36846 and 36805 (Level IV)

Erica,

I'm going to forward outstanding issues for the Yerington project.

Please check below for the first one.

11/27/2007

Dina

From: Konstadina Vlahogiani
Sent: Thursday, November 01, 2007 2:42 PM
To: 'Adam, Sherryl'
Cc: 'Bassett, Penny'
Subject: Soils Yerington

Sherryl,

In report nos. 36846 and 36805, the background calibration check of GER14 for Ra-226da is reported as out-of-limits (Ab); however, there are no limits set up for this. Please check and set up limits.

In report no. 36846, the 121.78 keV FWHM resolution check of GER10 on 9/10/07 is reported as out-of-limits (Ab); the project samples were analyzed that date. Please check the limits and correct.

In report no. 36805, the background calibration check of GER4 for all analytes is reported as out-of-limits (Ab). Please check and correct.

In report no. 36805, the ra-228 result for sample BGS-A2-56S is reported as not-detected (flagged ND). The peak search report shows an area for the ra-228 peak but the identification report does not list it. Please check the raw data to confirm this result.

Thanks,

Dina

Confidentiality Notice: The information contained in this message is intended only for the use of the addressee, and may be confidential and/or privileged. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

11/27/2007

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 00-02	Gross Alpha (Coprecipitation)	RICH-RC-5021
EPA 903.0	Total Alpha Radium (Ra-226)	RICH-RC-5027
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr-89/90	RICH-RC-5006
ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007

Uncertainty Estimation

Test America Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x,y,z,\dots)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) <i>u_c Combined Uncertainty.</i>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result. <i>u_c, the combined uncertainty.</i> The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = 1.645 * \sqrt{2 * (BkgrndCnt / BkgrndCntMin) / SCntMin} * (ConvFct / (Eff * Yld * Abn * Vol)) * IngrFct$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{(BkgrndCnt / BkgrndCntMin) / SCntMin} + 2.71 / SCntMin) * (ConvFct / (Eff * Yld * Abn * Vol)) * IngrFct$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D) / [\sqrt{(TPUs^2 + TPUd^2)}]$ as defined by ICI/T BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

Date: 25-Sep-07

TAL Richland STLR

Ordered by Client Sample ID, Batch No.

Report No. : 36805

SDG No: 35711

Client ID	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC MDA	RER2
BGS-A2-48D	J5K251AA	RA-226	0.697 +- 0.104	=	pCi/g		0.0381	
		RA-228	0.754 +- 0.145	=	pCi/g		0.075	
BGS-A2-48S	J5K241AA	RA-226	1.18 +- 0.158	=	pCi/g		0.038	
		RA-228	1.07 +- 0.174	=	pCi/g		0.0733	
BGS-A2-49D	J5K201AA	RA-226	1.25 +- 0.164	=	pCi/g		0.0456	
		RA-228	1.31 +- 0.210	=	pCi/g		0.086	
BGS-A2-49S	J5K2X1AA	RA-226	1.19 +- 0.161	=	pCi/g		0.0441	
		RA-228	1.36 +- 0.225	=	pCi/g		0.0871	
BGS-A2-50D	J5K231AA	RA-226	1.06 +- 0.138	=	pCi/g		0.0407	
		RA-228	0.950 +- 0.173	=	pCi/g		0.0819	
BGS-A2-50S	J5K221AA	RA-226	1.07 +- 0.140	=	pCi/g		0.0337	
		RA-228	0.975 +- 0.160	=	pCi/g		0.0608	
BGS-A2-56D	J5K2V1AA	RA-226	0.802 +- 0.116	=	pCi/g		0.0445	
		RA-228	0.828 +- 0.149	=	pCi/g		0.0823	
BGS-A2-56S	J5K2R1AA	RA-226	1.07 +- 0.136	=	pCi/g		0.0282	
		RA-228	<u>1.28</u> +- 0.201	ND	pCi/g		<u>0.139</u>	3 pg. 139
BGS-A2-57D	J5K2N1AA	RA-226	0.926 +- 0.123	=	pCi/g		0.0277	
		RA-228	0.741 +- 0.147	=	pCi/g		0.0548	
BGS-A2-57S	J5K2L1AA	RA-226	0.792 +- 0.104	=	pCi/g		0.0275	
		RA-228	0.801 +- 0.140	=	pCi/g		0.0578	
BGS-A2-58D	J5K2K1AA	RA-226	0.960 +- 0.126	=	pCi/g		0.0326	
		RA-228	1.03 +- 0.167	=	pCi/g		0.0611	
BGS-A2-58S	J5K2J1AA	RA-226	1.06 +- 0.144	=	pCi/g		0.0379	
		RA-228	1.17 +- 0.183	=	pCi/g		0.0713	
BGS-A2-59D	J5K2H1AA	RA-226	0.903 +- 0.119	=	pCi/g		0.0354	
		RA-228	0.743 +- 0.141	=	pCi/g		0.0745	
BGS-A2-59S	J5K2G1AA	RA-226	0.764 +- 0.112	=	pCi/g		0.0378	
		RA-228	0.839 +- 0.164	=	pCi/g		0.0749	
BGS-A2-59S DUP	J5K2G1AC	RA-226	0.680 +- 0.103	=	pCi/g		0.0378	(1.1) ✓

TAL Richland RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPU_s)+sq(TPU_d))] as defined by ICPT BOA.
 rptSTLRchSaSum = ERPMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

Sample was re-counted - not enough volume for real duplicate

Sample Results Summary

Date: 25-Sep-07

TAL Richland STLR

Ordered by Client Sample ID, Batch No.

Report No. : 36805

SDG No: 35711

Client ID	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC MDA	RER2
BGS-A2-59S DUP	J5K2G1AC	RA-228	0.755 +- 0.157	=	pCi/g		0.0722	0.7
BGS-A2-60D	J5K2Q1AA	RA-226	0.775 +- 0.107	=	pCi/g		0.0261	
		RA-228	0.788 +- 0.149	=	pCi/g		0.0517	
BGS-A2-60S	J5K2P1AA	RA-226	0.797 +- 0.116	=	pCi/g		0.0457	
		RA-228	0.862 +- 0.166	=	pCi/g		0.0857	
Number of Results:		34						

TAL Richland rptSTLRchSaSum V5.1.4 A2002
 RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
 = ERPIMS - Equal To, Analyte Detected

QC Results Summary
TAL Richland STL
 Ordered by QC Type, Batch No.

Date: 25-Sep-07

Report No. : 36805

SDG No.: 35711

QC Type	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC MDA
BLANK QC	J5WEL1AA	RA-226	-0.0202 +- 0.0501	N	pCi/g				0.0615
		RA-228	-0.1340 +- 0.0828	N	pCi/g				0.101
LCS	J5WEL1AC	CS-137	1.19 +- 0.150	=	pCi/g		116%	0.2	0.0247
Number of Results:		3							



TAL Richland Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchQcSum = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-16
Client Sample ID: BGS-A2-48D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 2:00:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K251AA			Report DB ID: 9J5K2510								
RA-226	0.697	=	0.10	0.10	0.0381	pCi/g		(18.3)	9/20/07 05:26 a	361.0		E901.1
								(13.5)			g	GER4\$1
RA-228	0.754	=	0.14	0.14	0.075	pCi/g		(10.1)	9/20/07 05:26 a	361.0		E901.1
								(10.4)			g	GER4\$1

Number of Results: 2

Comments:

TAL Richland
rptSTLRchSample
V5.1.4 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
= ERPIMS - Equal To, Analyte Detected
D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-15
Client Sample ID: BGS-A2-48S

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 2:00:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K241AA			Report DB ID: 9J5K2410								
RA-226	1.18	=	0.16	0.16	0.038	pCi/g		(31.2)	9/19/07 06:24 p	352.9		E901.1
								(15.)			g	GER8\$1
RA-228	1.07	=	0.17	0.17	0.0733	pCi/g		(14.6)	9/19/07 06:24 p	352.9		E901.1
								(12.4)			g	GER8\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-12
Client Sample ID: BGS-A2-49D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 11:45:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K201AA		Report DB ID: 9J5K2010									
RA-226	1.25	=	0.16	0.16	0.0456	pCi/g		(27.5)	9/19/07 06:22 p		322.4	E901.1
								(15.2)			g	GER5\$1
RA-228	1.31	=	0.21	0.21	0.086	pCi/g		(15.2)	9/19/07 06:22 p		322.4	E901.1
								(12.5)			g	GER5\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I

Date: 25-Sep-07

SAMPLE RESULTS

Lab Name: TA Richland
 Lot-Sample No.: J7H240308-11
 Client Sample ID: BGS-A2-49S

SDG: 35711
 Report No. : 36805
 COC No. :

Collection Date: 8/14/2007 11:45:00 AM
 Received Date: 8/23/2007 10:00:00 AM
 Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K2X1AA		Report DB ID: 9J5K2X10									
RA-226	1.19	=	0.16	0.16	0.0441	pCi/g		(27.) (14.7)	9/19/07 06:21 p		349.3 g	E901.1 GER4\$1
RA-228	1.36	=	0.22	0.22	0.0871	pCi/g		(15.6) (12.1)	9/19/07 06:21 p		349.3 g	E901.1 GER4\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERP|MS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-14
Client Sample ID: BGS-A2-50D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 12:30:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K231AA		Report DB ID: 9J5K2310									
RA-226	1.06	=	0.14	0.14	0.0407	pCi/g		(26.) (15.3)	9/19/07 06:23 p	364.5	g	E901.1 GER6\$1
RA-228	0.950	=	0.17	0.17	0.0819	pCi/g		(11.6) (11.)	9/19/07 06:23 p	364.5	g	E901.1 GER6\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-13
Client Sample ID: BGS-A2-50S

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 12:30:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K221AA			Report DB ID: 9J5K2210								
RA-226	1.07	=	0.14	0.14	0.0337	pCi/g		(31.8) (15.3)	9/19/07 06:22 p		340.4 g	E901.1 GER10S1
RA-228	0.975	=	0.16	0.16	0.0608	pCi/g		(16.) (12.2)	9/19/07 06:22 p		340.4 g	E901.1 GER10S1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-10
Client Sample ID: BGS-A2-56D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 10:45:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K2V1AA			Report DB ID: 9J5K2V10								
RA-226	0.802	=	0.12	0.12	0.0445	pCi/g		(18.)	9/19/07 06:20 p	365.1		E901.1
								(13.8)			g	GER14S1
RA-228	0.828	=	0.15	0.15	0.0823	pCi/g		(10.1)	9/19/07 06:20 p	365.1		E901.1
								(11.1)			g	GER14S1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-9
Client Sample ID: BGS-A2-56S

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 10:45:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K2R1AA			Report DB ID: 9J5K2R10								
RA-226	1.07	=	0.14	0.14	0.0282	pCi/g		(37.8)	9/19/07 06:20 p	349.0		E901.1
								(15.7)			g	GER11\$1
RA-228	1.28	ND	0.20	0.20	0.139	pCi/g		(9.2)	9/19/07 06:20 p	349.0		E901.1
								(12.7)			g	GER11\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-6
Client Sample ID: BGS-A2-57D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 9:15:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626			Work Order: J5K2N1AA			Report DB ID: 9J5K2N10						
RA-226	0.926	=	0.12	0.12	0.0277	pCi/g		(33.5) (15.)	9/19/07 05:57 a		340.3 g	E901.1 GER12\$1
RA-228	0.741	=	0.15	0.15	0.0548	pCi/g		(13.5) (10.1)	9/19/07 05:57 a		340.3 g	E901.1 GER12\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-5
Client Sample ID: BGS-A2-57S

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 9:15:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626			Work Order: JSK2L1AA			Report DB ID: 9J5K2L10						
RA-226	0.792	=	0.10	0.10	0.0275	pCi/g		(28.8) (15.2)	9/19/07 05:56 a		341.3 g	E901.1 GER11\$1
RA-228	0.801	=	0.14	0.14	0.0578	pCi/g		(13.9) (11.4)	9/19/07 05:56 a		341.3 g	E901.1 GER11\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-4
Client Sample ID: BGS-A2-58D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 8:30:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K2K1AA		Report DB ID: 9J5K2K10									
RA-226	0.960	=	0.13	0.13	0.0326	pCi/g		(29.5) (15.2)	9/19/07 05:56 a		363.3 g	E901.1 GER10\$1
RA-228	1.03	=	0.17	0.17	0.0611	pCi/g		(16.9) (12.4)	9/19/07 05:56 a		363.3 g	E901.1 GER10\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-3
Client Sample ID: BGS-A2-58S

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 8:30:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K2J1AA		Report DB ID: 9J5K2J10									
RA-226	1.06	=	0.14	0.14	0.0379	pCi/g		(27.9) (14.7)	9/19/07 05:56 a		359.2 g	E901.1 GER8S1
RA-228	1.17	=	0.18	0.18	0.0713	pCi/g		(16.4) (12.8)	9/19/07 05:56 a		359.2 g	E901.1 GER8S1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-2
Client Sample ID: BGS-A2-59D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 8:00:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Allquot Size	Analy Method, Primary Detector
Batch: 7241626			Work Order: J5K2H1AA			Report DB ID: 9J5K2H10						
RA-226	0.903	=	0.12	0.12	0.0354	pCi/g		(25.5)	9/19/07 05:55 a		373.3	E901.1
								(15.1)			g	GER6\$1
RA-228	0.743	=	0.14	0.14	0.0745	pCi/g		(10.)	9/19/07 05:55 a		373.3	E901.1
								(10.5)			g	GER6\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-1
Client Sample ID: BGS-A2-59S

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 8:00:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626		Work Order: J5K2G1AA		Report DB ID: 9J5K2G10								
RA-226	0.764	=	0.11	0.11	0.0378	pCi/g		(20.2) (13.7)	9/19/07 05:55 a	370.6	g	E901.1 GER4\$1
RA-228	0.839	=	0.16	0.16	0.0749	pCi/g		(11.2) (10.2)	9/19/07 05:55 a	370.6	g	E901.1 GER4\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-8
Client Sample ID: BGS-A2-60D

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 10:15:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626			Work Order: J5K2Q1AA			Report DB ID: 9J5K2Q10						
RA-226	0.775	=	0.11	0.11	0.0261	pCi/g		(29.7)	9/19/07 06:19 p		366.1	E901.1
								(14.5)			g	GER12S1
RA-228	0.788	=	0.15	0.15	0.0517	pCi/g		(15.2)	9/19/07 06:19 p		366.1	E901.1
								(10.6)			g	GER12S1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240308-7
Client Sample ID: BGS-A2-60S

SDG: 35711
Report No. : 36805
COC No. :

Collection Date: 8/14/2007 10:15:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626			Work Order: J5K2P1AA			Report DB ID: 9J5K2P10						
RA-226	0.797	=	0.12	0.12	0.0457	pCi/g		(17.4) (13.7)	9/19/07 05:57 a		363.4 g	E901.1 GER14\$1
RA-228	0.862	=	0.17	0.17	0.0857	pCi/g		(10.) (10.4)	9/19/07 05:57 a		363.4 g	E901.1 GER14\$1

Number of Results: 2

Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM II

Date: 25-Sep-07

DUPLICATE RESULTS

Lab Name: TA Richland
 Lot-Sample No.: J7H240308-1
 Client Sample ID: BGS-A2-59S DUP

SDG: 35711
 Report No. : 36805
 COC No. :

Collection Date: 8/14/2007 8:00:00 AM
 Received Date: 8/23/2007 10:00:00 AM
 Matrix: SOIL SO

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5K2G1AC		Report DB ID: J5K2G1CR		Orig Sa DB ID: 9J5K2G10							
RA-226	0.680	=	0.10	0.10	0.0378	pCi/g		(18.)	9/19/07 06:26 p		370.6	E901.1
	0.764	= RER2	1.1					(13.2)			g	GER7\$1
RA-228	0.755	=	0.16	0.16	0.0722	pCi/g		(10.5)	9/19/07 06:26 p		370.6	E901.1
	0.839	= RER2	0.7					(9.6)			g	GER7\$1

Number of Results: 2

Comments:

TAL Richland RER2 - Replicate Error Ratio = $(S-D)/[\sqrt{(\text{sq}(TPU_s)+\text{sq}(TPU_d))}]$ as defined by ICFP BOA.
 rptSTLRchDupV5.1 MDC|MDA,Le - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 .4 A2002 = ERPIMS - Equal To, Analyte Detected

FORM II
BLANK RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H290000-626

SDG: 35711
Report No. : 36805

Matrix: SOIL

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Lc	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5WEL1AA			Report DB ID: J5WEL1AB								
RA-226	-0.0202	ND	0.050	0.050	0.0615	pCi/g		-0.33	9/19/07 05:57 a		200.6	E901.1
								-0.81			g	GER15\$1
RA-228	-0.1340	ND	0.083	0.083	0.101	pCi/g		-(1.3)	9/19/07 05:57 a		200.6	E901.1
								-(3.2)			g	GER15\$1

Number of Results: 2

Comments:

FORM II
LCS RESULTS

Date: 25-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H290000-626

SDG: 35711
Report No. : 36805

Matrix: SOIL

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 7241626	Work Order: J5WEL1AC		Report DB ID: J5WEL1CS										
CS-137	1.19	=	0.15	0.15	0.0247	pCi/g		1.03	2.4	116%	9/19/07 06:24 p	200.76	E901.1
							Rec Limits:	70.	130.	0.2		g	GER15\$1

Number of Results: 1

Comments:

CHAIN OF CUSTODY

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201 East Washington Street / Suite 500
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YERS000323

TAL RICHLAND

PROJECT NAME: Yerington Mine Site							LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA								
PROJECT NUMBER: 132039															
J7H240308							35711		Due 09-14-07						
LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	OC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ----- END	PH READING (ppm)
01	BGS-A2-48S	8/14/07	1400	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0 (HASL 300 (U, TH)) Ra-226, 228			J5K24		---0.1 0.5	
02	BGS-A2-48D	↓	↓		1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0 (HASL 300 (U, TH)) ↓			J5K25		---2 3	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	
COLLECTED & RELEASED BY: <i>[Signature]</i>		DATE: 8/22/07	TIME: 14:00	COOLER I.D.:						COMMENTS (see note on back):					
RECEIVED BY: <i>[Signature]</i>		DATE: 8/23/07	TIME: 10:00	RELINQUISHED BY:				DATE: / /	TIME: :	Level 4					
RECORD RETURNED BY:		DATE: / /	TIME: :												
COURIER:				SHIPPING NUMBER:						CCIKF-0109					

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK.

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201 East Washington Street / Suite 500
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YERS000327

TAL RICHLAND

PROJECT NAME: Yerington Mine Site LABORATORY NAME & ADDRESS: SEVERN TRENT LABS. RICHLAND, WA
PROJECT NUMBER: 132039

J7H240308 357X1 due 09-14-07

LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ----- END	PID READING (ppm)
01	BGS-A2-50S	8/14/07	12:30	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, <u>HASL 300 (U, TH)</u> <u>Re-226, 228</u>			J5K22		---0.1 0.4	
02	BGS-A2-50D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, <u>HASL 300 (U, TH)</u> ↓			J5K23		---2 3	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY: <u>[Signature]</u>	DATE 8/22/07	TIME 1400	COOLER I.D.:			COMMENTS (see note on back): <u>Level 4</u>
RECEIVED BY: <u>[Signature]</u>	DATE 8/23/07	TIME 1000	RELINQUISHED BY:			
RECORD RETURNED BY:	DATE / /	TIME :				
COURIER:			SHIPPING NUMBER:			<u>CCIKF-0109</u>

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201 East Washington Street / Suite 100
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YERS000325

TAL RICHLAND

PROJECT NAME: <u>Yerington Mine Site</u>									LABORATORY NAME & ADDRESS: <u>SEVERN TRENT LABS, RICHLAND, WA</u>							
PROJECT NUMBER: <u>132039</u>																
<u>J 711240308</u>									<u>35711</u>							
<u>Due 09-14-07</u>																
LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	OC - REC	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN	DEPTH (FT.) END	PRO. RECEIVING (qty)
01	BGS-A2-49S	8/14/07	11:45	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) <u>Ra-226, 228</u>			J5K2X		0.1	0.8	
02	BGS-A2-49D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) ↓			J5K20		2	3	
03														---	---	
04														---	---	
05														---	---	
06														---	---	
07														---	---	
08														---	---	
09														---	---	
10														---	---	
COLLECTED & RELEASED BY: <u>Penny Barrett</u>		DATE: <u>8/22/07</u>	TIME: <u>14:00</u>	COOLER I.D.:				COMMENTS (see note on back):								
RECEIVED BY: <u>[Signature]</u>		DATE: <u>8/23/07</u>	TIME: <u>10:00</u>	RELINQUISHED BY:				DATE: <u>1/1</u>	TIME: <u>:</u>	<u>Level 4</u>						
RECORD RETURNED BY:		DATE: <u>1/1</u>	TIME: <u>:</u>	SHIPPING NUMBER:				<u>001KF-0109</u>								

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK.

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702-938-4080 / FAX 702-938-4082

201 East Washington Street / Suite 500
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

VERS000339

PROJECT NAME: Yerington Mine Site LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA
PROJECT NUMBER: 132039

J7H240308 35711 Due 09-14-07

LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN	DEPTH (FT.) END	PHI BEADING (mm)
01	BGS-A2-56S	8/14/07	10:45	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) <i>Pa-226, 228</i>			<i>J5K2R</i>		0.1	0.8	
02	BGS-A2-56D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) ↓			<i>J5K2V</i>		2	3	
03														---	---	
04														---	---	
05														---	---	
06														---	---	
07														---	---	
08														---	---	
09														---	---	
10														---	---	

COLLECTED & RELEASED BY: <i>Penny B...</i>	DATE: 8/22/07	TIME: 14:00	COOLER I.D.:	DATE:	TIME:	COMMENTS (see note on back): <i>Level 4</i>
RECEIVED BY: <i>RJD</i>	DATE: 8/23/07	TIME: 10:00	RELINQUISHED BY:	DATE: / /	TIME: :	
RECORD RETURNED BY:	DATE: / /	TIME: :				
COURIER:			SHIPPING NUMBER:			<i>001KF-0109</i>

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK.

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702-938-4080 / FAX 702-938-4082

201 East Washington Street / Suite 300
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YER S000347

PROJECT NAME: Yerington Mine Site LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA
PROJECT NUMBER: 132039

J7H240308 35711 Due 09-14-07

LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REC	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ----- END	PHI READINGS (ppm)
01	BGS-A2-60S	8/14/07	10:15	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (G, TH) <u>Pa-226, 228</u>			J5K2P		0.1 ----- 0.5	
02	BGS-A2-60D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (G, TH) ↓			J5K2Q		2 ----- 3	
03														----	
04														----	
05														----	
06														----	
07														----	
08														----	
09														----	
10														----	

COLLECTED & RELEASED BY: <u>Penny Bassett</u>	DATE <u>8/22/07</u>	TIME <u>1400</u>	COOLER I.D.:	DATE	TIME	COMMENTS (see note on back): <u>Level 4</u>
RECEIVED BY: <u>[Signature]</u>	DATE <u>8/23/07</u>	TIME <u>1000</u>	RELINQUISHED BY:	DATE <u>1/1</u>	TIME	
RECORD RETURNED BY:	DATE <u>1/1</u>	TIME	SHIPPING NUMBER:			<u>001KF-0109</u>

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201 East Washington Street / Suite 300
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

VER S000341

TAL RICHLAND

PROJECT NAME: <u>Yerington Mine Site</u>				LABORATORY NAME & ADDRESS: <u>SEVERN TRENT LABS, RICHLAND, WA</u>												
PROJECT NUMBER: <u>132039</u>																
				<u>J7H240308</u>				<u>35711</u>		<u>Due 09-14-07</u>						
LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN	DEPTH (FT.) END	PD READING (ppm)
01	BGS-A2-57S	8/14/07	09:15	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) <u>Pb-226, 228</u>			J5K2L		0.1	0.1	
02	BGS-A2-57D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) ↓			J5K2N		2	3	
03														---	---	
04														---	---	
05														---	---	
06														---	---	
07														---	---	
08														---	---	
09														---	---	
10														---	---	
COLLECTED & RELEASED BY: <u>Penny Barrett</u>		DATE: <u>8/22/07</u>	TIME: <u>14:00</u>	COOLER I.D.:								COMMENTS (see note on back):				
RECEIVED BY: <u>[Signature]</u>		DATE: <u>8/23/07</u>	TIME: <u>10:00</u>	RELINQUISHED BY:				DATE: <u>1/1</u>	TIME: <u>:</u>	Level 4						
RECORD RETURNED BY:		DATE: <u>1/1</u>	TIME: <u>:</u>	SHIPPING NUMBER:				Enfas Billing								
COURIER:								00LKF-0109								

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Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YORS000343

PROJECT NAME: Yerington Mine Site LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA

PROJECT NUMBER: 132039

J7H240308 35711 Due 09.14.07

LINE NO.	SAMPLE - I.D.	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.)		PID READING (ppm)
		DATE	TIME											BEGIN	END	
01	BGS-A2-58S	8/14/07	08:30	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) <u>Pa-226, 228</u>			J5K2J		0.1	0.8	
02	BGS-A2-58D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) ↓			J5K2K		2	3	
03																
04																
05																
06																
07																
08																
09																
10																

COLLECTED & RECEIVED BY: <u>[Signature]</u>	DATE: <u>8/22/07</u>	TIME: <u>14:00</u>	COOLER I.D.:	DATE:	TIME:	COMMENTS (see note on back): <u>Level 4</u>
RECEIVED BY: <u>[Signature]</u>	DATE: <u>8/23/07</u>	TIME: <u>10:00</u>	RELINQUISHED BY:	DATE: <u>1/1</u>	TIME:	
RECORD RETURNED BY:	DATE: <u>1/1</u>	TIME:				<u>Enfos Billing</u>
COURIER:			SHIPPING NUMBER:			<u>COLICE-0109</u>

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Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YERS000345

PROJECT NAME: <u>Yerington Mine Site</u>						LABORATORY NAME & ADDRESS: <u>SEVERN TRENT LABS, RICHLAND, WA</u>										
PROJECT NUMBER: <u>132039</u>																
<u>J7H240308</u>						<u>35711</u>										
<u>8/14/07</u>						<u>June 09.14.07</u>										
LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN	DEPTH (FT.) END	PID RESIDUE (ppm)
01	BGS-A2-59S	8/14/07	0800	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) <u>PB</u> <u>Re-226, 228</u>			J5K3G		0.1		
02	BGS-A2-59D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) ↓			J5K2H		0.8		
03														3		
04																
05																
06																
07																
08																
09																
10																
COLLECTED & RELEASED BY: <u>Penny Bassett</u>		DATE: <u>8/22/07</u>	TIME: <u>14:00</u>	COOLER I.D.:						COMMENTS (see note on back):						
RECEIVED BY: <u>[Signature]</u>		DATE: <u>8/23/07</u>	TIME: <u>10:00</u>	RELINQUISHED BY:				DATE: <u>1/1</u>	TIME: <u>:</u>	<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;">Level 4</div> Entos Billing COIKF-0109						
RECORD RETURNED BY:		DATE: <u>1/1</u>	TIME: <u>:</u>													
COURIER:				SHIPPING NUMBER:												

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STL

Sample Check-in List

Date/Time Received: 8-23-07 1000

Client: BRC SDG #: 35711 NA SAF #: _____ NA

Work Order Number: J7H240308 Chain of Custody # _____

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: _____ NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 16
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - _____ tape
 - _____ custody seals
 - _____ hazard labels
 - appropriate samples labels
9. Samples are:
 - in good condition
 - _____ broken
 - _____ leaking
 - _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? SOIL NA pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? * Yes No
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [Signature] Date: 8-23-07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/05, Rev. 5

GAMMA

SAMPLE AND QC DATA

Lot No., Due Date: J7H240308; 09/14/2007
Client, Site: 536403; BRC GW/SOIL Yerington Quarterly GW/Soil
QC Batch No., Method Test: 7241626; RGAMMA Gamma by GER
SDG, Matrix: 35711; SOIL

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete: includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MED results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Olga Antonson

Date

9/21/07

TAL RICHLAND

8/31/2007 10:05:22 AM

Sample Preparation/Analysis

Balance Id:1120421763

536403, Brown and Caldwell
and Caldwell

, Brown

AX Gamma PrpRC5013/5017

Pipet #: _____

TA Gamma by HPGE 10 day ingrowth
01 STANDARD TEST SET

Sep1 DT/Tm Tech: _____

AnalyDueDate: 09/10/2007

Batch: 7241626 SOIL pCi/g

PM, Quote: SA, 73181

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None All Tests: 7241626 AXTA,

Prep Tech: ,Barcotl

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 J5K2G-1-AA J7H240308-1-SAMP 08/14/2007 08:00	370.60g.in			5200	1000		64 ✓	1555	9/19/07	✓
2 J5K2G-1-AC-X J7H240308-1-DUP 08/14/2007 08:00	Not enough sample (recount sample)						67 ✓	0426	9/19/07	✓
3 J5K2H-1-AA J7H240308-2-SAMP 08/14/2007 08:00	373.30g.in			5200	1000		66 ✓	1555	9/19/07	✓
4 J5K2J-1-AA J7H240308-3-SAMP 08/14/2007 08:30	359.20g.in						68 ✓	1556		✓
5 J5K2K-1-AA J7H240308-4-SAMP 08/14/2007 08:30	363.30g.in						610 ✓	1556		✓
6 J5K2L-1-AA J7H240308-5-SAMP 08/14/2007 09:15	341.30g.in						611 ✓	1556		✓
7 J5K2N-1-AA J7H240308-6-SAMP 08/14/2007 09:15	340.30g.in						612 ✓	1557		✓

TAL RICHLAND

8/31/2007 10:05:23 AM

Sample Preparation/Analysis

Balance Id:1120421763

536403, Brown and Caldwell
and Caldwell

, Brown

AX Gamma PrpRC5013/5017

Pipet #: _____

TA Gamma by HPGE

01 STANDARD TEST SET

Sep1 DT/Tm Tech:

AnalyDueDate: 09/10/2007

Batch: 7241626 SOIL

pCi/g

PM, Quote: SA , 73181

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,Barcotl



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 J5K2P-1-AA J7H240308-7-SAMP 08/14/2007 10:15		363.40g,in	AmtRec: 80ZJAR	#Containers: 1			G14 ✓	1557	9/9/07	
9 J5K2Q-1-AA J7H240308-8-SAMP 08/14/2007 10:15		366.10g,in	AmtRec: 80ZJAR	#Containers: 1			G12 ✓	0419		
10 J5K2R-1-AA J7H240308-9-SAMP 08/14/2007 10:45		349.00g,in	AmtRec: 80ZJAR	#Containers: 1			G11 ✓	0420		
11 J5K2V-1-AA J7H240308-10-SAMP 08/14/2007 10:45		365.10g,in	AmtRec: 80ZJAR	#Containers: 1			G14 ✓	0420		
12 J5K2X-1-AA J7H240308-11-SAMP 08/14/2007 11:45		349.30g,in	AmtRec: 80ZJAR	#Containers: 1			G4 ✓	0421		
13 J5K20-1-AA J7H240308-12-SAMP 08/14/2007 11:45		322.40g,in	AmtRec: 80ZJAR	#Containers: 1			G5 ✓	0421		
14 J5K22-1-AA J7H240308-13-SAMP 08/14/2007 12:30		340.40g,in	AmtRec: 80ZJAR	#Containers: 1			G10 ✓	0422		

TAL RICHLAND

8/31/2007 10:05:24 AM

Sample Preparation/Analysis

Balance Id:n/a

AX Gamma PrpRC5013/5017
 TA Gamma by HPGE
 01 STANDARD TEST SET

Pipet #:

AnalyDueDate: 09/10/2007

Sep1 DT/Tm Tech:

Batch: 7241626
 SEQ Batch, Test: None

pCi/g

Sep2 DT/Tm Tech:

Prep Tech: ,Barcotl



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On (24hr) Circle	Off	CR Analyst, Init/Date	Comments:
-----------------------------------	----------------	--------------------------	---------------------	-----------	-----------------	----------------	-------------	------------------------	-----	-----------------------	-----------

J5WEL1AA-BLK:

Cs-137 RDL:0.2 pCi/g LCL: UCL: RPD: Cs-137DA RDL:0.2 pCi/g LCL: UCL: RPD:

J5WEL1AC-LCS:

Cs-137 RDL:0.2 pCi/g LCL:70 UCL:130 RPD:35 Cs-137DA RDL:0.2 pCi/g LCL:70 UCL:130 RPD:35

J5K2G1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

J5WEL1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

J5WEL1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

9/21/2007 1:28:15 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/21/2006, 9/26/2007, Batch: '7241626', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7241626				
AC	CalcC	StringerR	8/31/2007 11:10:21	
SC	wagarr	IsBatched	8/29/2007 4:22:17 PM	ICOC_RADCALC v4 8.26
SC	StringerR	inCnt1	8/31/2007 11:10:21 AM	RICH-RD-0007 REVISION 6
SC	StringerR	CalcC	9/20/2007 5:27:32 PM	RICH-RD-0007 REVISION 6
AC		StringerR	9/20/2007 5:27:32 PM	

AC: Accepting Entry. SC: Status Change

STL Richland
Richland Wa.

9/21/2007 1:28:14 PM

Rpt DB Transfer log (Batch Results)

SDG or Batch Isotope	Rpt Db Id Method	RTst Qc	LotSample Analysis Date	Client Id Result	Matrix Cnt Uncert	Received Date Tot Uncert	Sample Date Inga	Sample Date Units	Expected Yield	Volumes
35711	9J5K2010		J7H24030812	BGS-A2-49D	SOIL	8/23/2007 10:00:00	8/14/2007 11:45:00 AM			
	RA-226DA	AXTA 0	9/19/2007 6:22:00 PM	1.2524E+00	8.225E-02	8.225E-02	4.56E-02	PCI/GRAM		3.224E+2
	RA-228DA	AXTA 0	9/19/2007 6:22:00 PM	1.3054E+00	1.048E-01	1.048E-01	8.603E-02	PCI/GRAM		3.224E+2
35711	9J5K2210		J7H24030813	BGS-A2-50S	SOIL	8/23/2007 10:00:00	8/14/2007 12:30:00 PM			
	RA-226DA	AXTA 0	9/19/2007 6:22:45 PM	1.0734E+00	7.014E-02	7.014E-02	3.373E-02	PCI/GRAM		3.404E+2
	RA-228DA	AXTA 0	9/19/2007 6:22:45 PM	9.7462E-01	8.0E-02	8.0E-02	6.083E-02	PCI/GRAM		3.404E+2
35711	9J5K2310		J7H24030814	BGS-A2-50D	SOIL	8/23/2007 10:00:00	8/14/2007 12:30:00 PM			
	RA-226DA	AXTA 0	9/19/2007 6:23:31 PM	1.0565E+00	6.901E-02	6.901E-02	4.066E-02	PCI/GRAM		3.645E+2
	RA-228DA	AXTA 0	9/19/2007 6:23:31 PM	9.499E-01	8.647E-02	8.647E-02	8.192E-02	PCI/GRAM		3.645E+2
35711	9J5K2410		J7H24030815	BGS-A2-48S	SOIL	8/23/2007 10:00:00	8/14/2007 2:00:00 PM			
	RA-226DA	AXTA 0	9/19/2007 6:24:10 PM	1.1825E+00	7.897E-02	7.897E-02	3.796E-02	PCI/GRAM		3.529E+2
	RA-228DA	AXTA 0	9/19/2007 6:24:10 PM	1.0724E+00	8.682E-02	8.682E-02	7.326E-02	PCI/GRAM		3.529E+2
35711	9J5K2510		J7H24030816	BGS-A2-48D	SOIL	8/23/2007 10:00:00	8/14/2007 2:00:00 PM			
	RA-226DA	AXTA 0	9/20/2007 5:26:03 AM	6.97E-01	5.182E-02	5.182E-02	3.815E-02	PCI/GRAM		3.61E+2
	RA-228DA	AXTA 0	9/20/2007 5:26:03 AM	7.5394E-01	7.241E-02	7.241E-02	7.501E-02	PCI/GRAM		3.61E+2
35711	9J5K2G10		J7H2403081	BGS-A2-59S	SOIL	8/23/2007 10:00:00	8/14/2007 8:00:00 AM			
	RA-226DA	AXTA 0	9/19/2007 5:55:30 AM	7.6367E-01	5.59E-02	5.59E-02	3.784E-02	PCI/GRAM		3.706E+2
	RA-228DA	AXTA 0	9/19/2007 5:55:30 AM	8.394E-01	8.195E-02	8.195E-02	7.493E-02	PCI/GRAM		3.706E+2
35711	9J5K2H10		J7H2403082	BGS-A2-59D	SOIL	8/23/2007 10:00:00	8/14/2007 8:00:00 AM			
	RA-226DA	AXTA 0	9/19/2007 5:55:50 AM	9.0292E-01	5.967E-02	5.967E-02	3.542E-02	PCI/GRAM		3.733E+2
	RA-228DA	AXTA 0	9/19/2007 5:55:50 AM	7.4344E-01	7.067E-02	7.067E-02	7.45E-02	PCI/GRAM		3.733E+2
35711	9J5K2J10		J7H2403083	BGS-A2-58S	SOIL	8/23/2007 10:00:00	8/14/2007 8:30:00 AM			
	RA-226DA	AXTA 0	9/19/2007 5:56:14 AM	1.059E+00	7.186E-02	7.186E-02	3.792E-02	PCI/GRAM		3.592E+2
	RA-228DA	AXTA 0	9/19/2007 5:56:14 AM	1.1708E+00	9.155E-02	9.155E-02	7.134E-02	PCI/GRAM		3.592E+2
35711	9J5K2K10		J7H2403084	BGS-A2-58D	SOIL	8/23/2007 10:00:00	8/14/2007 8:30:00 AM			
	RA-226DA	AXTA 0	9/19/2007 5:56:33 AM	9.6034E-01	6.306E-02	6.306E-02	3.257E-02	PCI/GRAM		3.633E+2
	RA-228DA	AXTA 0	9/19/2007 5:56:33 AM	1.0333E+00	8.339E-02	8.339E-02	6.106E-02	PCI/GRAM		3.633E+2
35711	9J5K2L10		J7H2403085	BGS-A2-57S	SOIL	8/23/2007 10:00:00	8/14/2007 9:15:00 AM			
	RA-226DA	AXTA 0	9/19/2007 5:56:44 AM	7.9225E-01	5.2E-02	5.2E-02	2.75E-02	PCI/GRAM		3.413E+2
	RA-228DA	AXTA 0	9/19/2007 5:56:44 AM	8.0139E-01	7.012E-02	7.012E-02	5.781E-02	PCI/GRAM		3.413E+2
35711	9J5K2N10		J7H2403086	BGS-A2-57D	SOIL	8/23/2007 10:00:00	8/14/2007 9:15:00 AM			
	RA-226DA	AXTA C	9/19/2007 5:57:04 AM	9.2635E-01	6.163E-02	6.163E-02	2.766E-02	PCI/GRAM		3.403E+2
	RA-228DA	AXTA 0	9/19/2007 5:57:04 AM	7.4102E-01	7.326E-02	7.326E-02	5.478E-02	PCI/GRAM		3.403E+2
35711	9J5K2P10		J7H2403087	BGS-A2-60S	SOIL	8/23/2007 10:00:00	8/14/2007 10:15:00 AM			
	RA-226DA	AXTA 0	9/19/2007 5:57:25 AM	7.9686E-01	5.81E-02	5.81E-02	4.571E-02	PCI/GRAM		3.634E+2
	RA-228DA	AXTA 0	9/19/2007 5:57:25 AM	8.6168E-01	8.29E-02	8.29E-02	8.574E-02	PCI/GRAM		3.634E+2
35711	9J5K2Q10		J7H2403088	BGS-A2-60D	SOIL	8/23/2007 10:00:00	8/14/2007 10:15:00 AM			
	RA-226DA	AXTA 0	9/19/2007 6:19:48 PM	7.7503E-01	5.342E-02	5.342E-02	2.614E-02	PCI/GRAM		3.661E+2
	RA-228DA	AXTA 0	9/19/2007 6:19:48 PM	7.8755E-01	7.44E-02	7.44E-02	5.172E-02	PCI/GRAM		3.661E+2
35711	9J5K2R10		J7H2403089	BGS-A2-56S	SOIL	8/23/2007 10:00:00	8/14/2007 10:45:00 AM			
	RA-226DA	AXTA 0	9/19/2007 6:20:19 PM	1.0667E+00	6.816E-02	6.816E-02	2.822E-02	PCI/GRAM		3.49E+2
	RA-228DA	AXTA 0	9/19/2007 6:20:19 PM	1.2833E+00	1.007E-01	1.007E-01	1.395E-01	PCI/GRAM		3.49E+2
35711	9J5K2V10		J7H24030810	BGS-A2-56D	SOIL	8/23/2007 10:00:00	8/14/2007 10:45:00 AM			
	RA-226DA	AXTA 0	9/19/2007 6:20:48 PM	8.0163E-01	5.815E-02	5.815E-02	4.45E-02	PCI/GRAM		3.651E+2
	RA-228DA	AXTA 0	9/19/2007 6:20:48 PM	8.2812E-01	7.439E-02	7.439E-02	8.232E-02	PCI/GRAM		3.651E+2
35711	9J5K2X10		J7H24030811	BGS-A2-49S	SOIL	8/23/2007 10:00:00	8/14/2007 11:45:00 AM			
	RA-226DA	AXTA 0	9/19/2007 6:21:35 PM	1.19E+00	8.07E-02	8.07E-02	4.412E-02	PCI/GRAM		3.493E+2
	RA-228DA	AXTA 0	9/19/2007 6:21:35 PM	1.3601E+00	1.123E-01	1.123E-01	8.711E-02	PCI/GRAM		3.493E+2
35711	J5K2G1CR		J7H2403081	BGS-A2-59S DUP	SOIL	8/23/2007 10:00:00	8/14/2007 8:00:00 AM			
	RA-226DA	AXTA 0 R	9/19/2007 6:26:03 PM	6.8027E-01	5.166E-02	5.166E-02	3.781E-02	PCI/GRAM		3.706E+2
	RA-228DA	AXTA 0 R	9/19/2007 6:26:03 PM	7.5488E-01	7.842E-02	7.842E-02	7.224E-02	PCI/GRAM		3.706E+2

7241626.7241626, **Samples Inserted | Updated | NotUpdated => 19 | 0 | 0,
 **Results Inserted | ReTestInserted | Updated | NotInserted => 37 | 0 | 0.
 **Diff RptDb | Qlms => .

SDG or Batch	Rpt Db Id	LotSample	Client Id	Matrix	Received Date	Sample Date			Volumes
Isotope	Method	RTst Qc	Analysis Date	Result	Cnt Uncert	Tot Uncert	moa	Units	Expected Yield
35711	J5WEL1AB	J7H290000626	INTRA-LAB BLANK	SOIL	8/23/2007 10:00:00	8/14/2007 8:00:00 AM			
RA-226DA	AXTA	0 B	9/19/2007 5:57:42 AM	-2.0219E-02	2.505E-02	2.505E-02	6.146E-02	PCI/GRAM	2.006E+2
RA-228DA	AXTA	0 B	9/19/2007 5:57:42 AM	-1.3371E-01	4.14E-02	4.14E-02	1.005E-01	PCI/GRAM	2.006E+2
35711	J5WEL1CS	J7H290000626	INTRA-LAB CHECK	SOIL	8/23/2007 10:00:00	8/14/2007 8:00:00 AM			
CS-137DA	AXTA	0 S	9/19/2007 6:24:53 PM	1.1888E+00	7.496E-02	7.496E-02	2.467E-02	PCI/GRAM	1.0274E+00

7241626 7241626, **Samples Inserted | Updated | NotUpdated => 19 | 0 | 0,
 **Results Inserted | ReTestInserted | Updated | NotInserted => 37 | 0 | 0 | 0.
 **Diff RptDb | Qtimes =>

GAMMA

STANDARDS AND TRACEABILITY

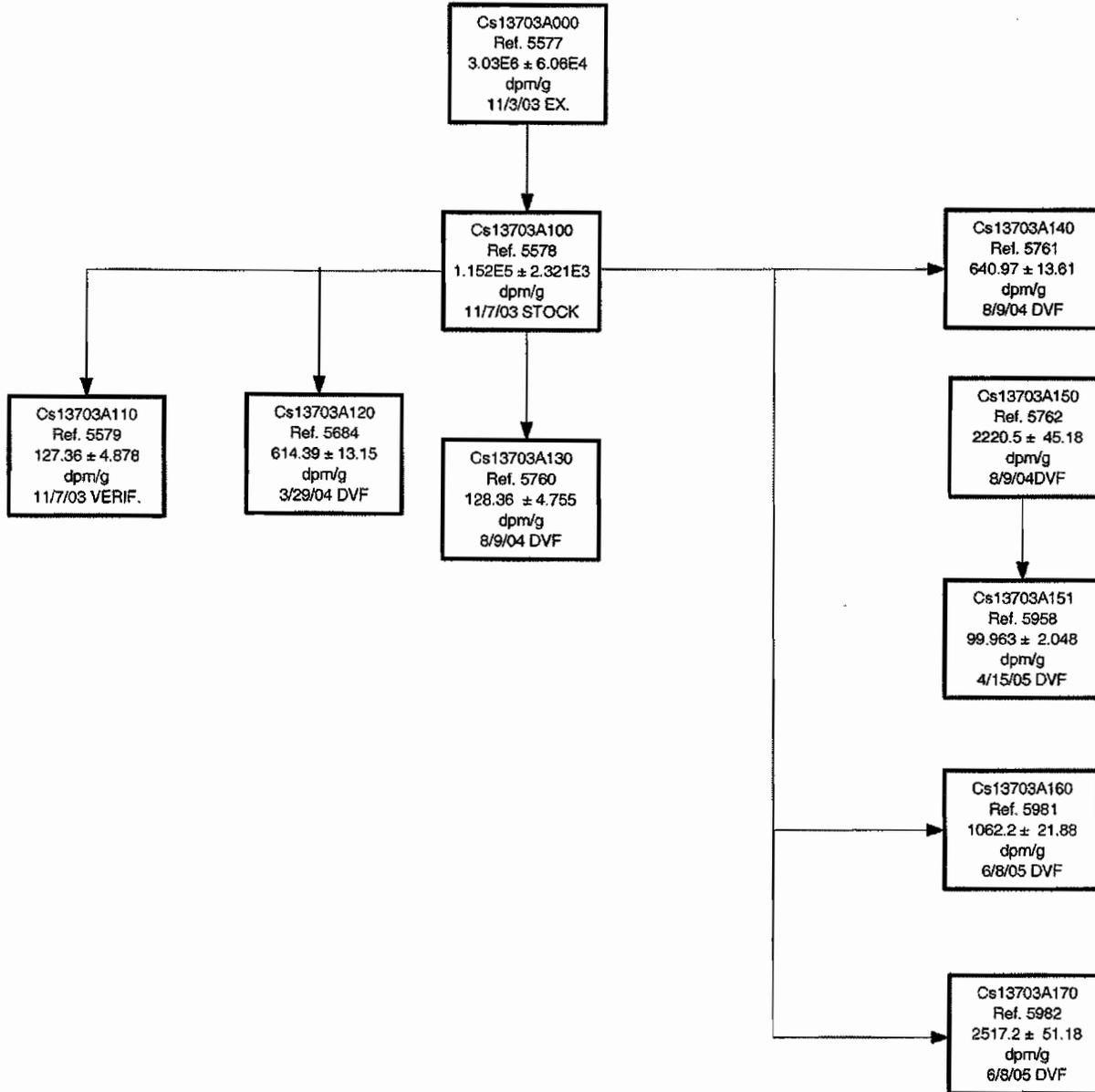
9/25/2007 1:54:18 PM

Standard Material Fractions (Vials)

Vial Prep: 9/24/06 to 9/26/07, SMFractionIdentifier Between GSE1137 and GSE1137, Order by SMIdentifier, ConstituentCode, SMFractionIdentifier

Vial Identifier	Constituent	Prep Activity/Concentration	Std Wt Used	Prep,Decayed To Date	Prep by	Std Decayed Activity/Concentration
Parent Standard: CS13703A170		Ref: 6/8/2005	2.5172E+03	± 5.982E+03	DPM/G	
GSE1137	CS-137	4.5852E+02 ± 1.090E+03 DPM	0.1917 g	8/29/2007 8/29/2007	Armstron	2.3918E+03 ± 5.684E+03 DPM/G
		4.5852E+002 ± 4.585E+002 (1)	4.5852E+002 , 4.5852E+002			

Cs13703A000



ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>6/8/2005</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1107E+05</u>	±	<u>2.238E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>1.3034</u>		
7) (% Error) of Weight of Source Material used	<u>0.3683</u>	%	
8) Diluent	<u>2M HNO3-P0500352</u>		
9) Total Weight of the Dilution (g)	<u>136.29</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2201</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.0622E+03</u>	±	<u>2.188E+01</u>
12) Total Uncertainty	<u>2.060</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A160</u>	<u>5981</u>	
14) Calibration Reference Date	<u>6/8/2005</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>6/8/2005</u>
16) Reviewed by/date	<u>SEW</u>		<u>6/9/2005</u>
17) Location <u>QCLAB/STWT1165</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = $(0.0048 / \text{Weight of Source Material used} * 100)$

10) % error of Dilution Wt. = $(0.3 / \text{Total Weight of Dilution} * 100)$

11) Specific Activity = $\text{Source Activity} * \text{Wt. of Source Material used} / \text{Total Wt. of the Dilution}$

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>6/8/2005</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1107E+05</u>	±	<u>2.238E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>3.0806</u>		
7) (% Error) of Weight of Source Material used	<u>0.1558</u>	%	
8) Diluent	<u>2M HNO3-P0500352</u>		
9) Total Weight of the Dilution (g)	<u>135.93</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2207</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>2.5172E+03</u>	±	<u>5.118E+01</u>
12) Total Uncertainty	<u>2.033</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A170</u>	<u>5982</u>	
14) Calibration Reference Date	<u>6/8/2005</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>	<u>6/8/2005</u>	
16) Reviewed by/date	<u>sew</u>	<u>6/9/2005</u>	
17) Location <u>QCLAB/STWT1166</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>8/9/2004</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1321E+05</u>	±	<u>2.281E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.7589</u>		
7) (% Error) of Weight of Source Material used	<u>0.6325</u>	%	
8) Diluent	<u>2M HNO3-P0400528</u>		
9) Total Weight of the Dilution (g)	<u>134.04</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2238</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>6.4097E+02</u>	±	<u>1.361E+01</u>
12) Total Uncertainty	<u>2.124</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A140</u>	<u>5761</u>	
14) Calibration Reference Date	<u>8/9/2004</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>	<u>8/9/2004</u>	
16) Reviewed by/date	<u>SEW</u>	<u>8/11/2004</u>	
17) Location <u>QCLAB/STWT1028</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = $(0.0048 / \text{Weight of Source Material used} * 100)$

10) % error of Dilution Wt. = $(0.3 / \text{Total Weight of Dilution} * 100)$

11) Specific Activity = $\text{Source Activity} * \text{Wt. of Source Material used} / \text{Total Wt. of the Dilution}$

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>8/9/2004</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1321E+05</u>	±	<u>2.281E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.1548</u>		
7) (% Error) of Weight of Source Material used	<u>3.1008</u>	%	
8) Diluent	<u>2M HNO3-P0400528</u>		
9) Total Weight of the Dilution (g)	<u>136.53</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2197</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.2836E+02</u>	±	<u>4.755E+00</u>
12) Total Uncertainty	<u>3.704</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A130</u>	<u>5760</u>	
14) Calibration Reference Date	<u>8/9/2004</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>8/9/2004</u>
16) Reviewed by/date	<u>SEW</u>		<u>8/11/2004</u>
17) Location <u>QCLAB/STWT1027</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>3/29/2004</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1416E+05</u>	±	<u>2.300E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.7012</u>		
7) (% Error) of Weight of Source Material used	<u>0.6845</u>	%	
8) Diluent	<u>2M HNO3-P0400085</u>		
9) Total Weight of the Dilution (g)	<u>130.29</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2303</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>6.1439E+02</u>	±	<u>1.315E+01</u>
12) Total Uncertainty	<u>2.141</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A120</u>	<u>5684</u>	
14) Calibration Reference Date	<u>3/29/2004</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>	<u>3/29/2004</u>	
16) Reviewed by/date	<u>SEW</u>	<u>4/1/2004</u>	
17) Location <u>QCLAB/STWT0946</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>11/7/2003</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1519E+05</u>	±	<u>2.321E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.1477</u>		
7) (% Error) of Weight of Source Material used	<u>3.2498</u>	%	
8) Diluent	<u>2M HNO3-P0200629</u>		
9) Total Weight of the Dilution (g)	<u>133.59</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2246</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.2736E+02</u>	±	<u>4.878E+00</u>
12) Total Uncertainty	<u>3.830</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A110</u>	<u>5579</u>	
14) Calibration Reference Date	<u>11/7/2003</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>11/7/2003</u>
16) Reviewed by/date	<u>SEW</u>		<u>11/13/2003</u>
17) Location	<u>QCLAB/STWT0872</u>	18) Exhausted	<u></u>

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>11/7/2003</u>
3) Source Identification Number / Ref. Number	<u>CS13703A000</u>	<u>5577</u>	
4) Source Activity (dpm ± dpm/g)	<u>3.0310E+06</u>	±	<u>6.062E+04</u>
5) Percent error of Source Activity	<u>2</u>	%	
6) Weight of Source Material used (g)	<u>5.0442</u>		
7) (% Error) of Weight of Source Material used	<u>0.0952</u>	%	
8) Diluent	<u>2M HNO3-P0200629</u>		
9) Total Weight of the Dilution (g)	<u>132.73</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2260</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.1519E+05</u>	±	<u>2.321E+03</u>
12) Total Uncertainty	<u>2.015</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
14) Calibration Reference Date	<u>11/7/2003</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>	<u>11/7/2003</u>	
16) Reviewed by/date	<u>SEW</u>	<u>11/13/2003</u>	
17) Location <u>QCLAB/STWT0871</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE RECORD FORM

1) Isotope Cs-137 2) Reference Number 5577

3) Half Life 30.17 yrs. 4) Storage Location Std. Lab (D-9)

5) Source Identification Number Cs13703A000

CALIBRATION DATA

6) Activity as Received Units 2.571E5 dps

7) Overall Uncertainty Percent 2.0%

8) Reference Date / Time 11-3-03 12:00 EST (9:00AM)

9) Activity dpm/g 3.0318E+6 ± 6.0635 E+4

10) Volume or Mass (ml/g) 5.08815g

11) Calibrated by ANALYTICS

12) Certificate Solution Number 67125-310

SURVEY DATA

13) Date Received 11/6/2003

14) Surveyed by W.G

15) Survey Reading (Beta/Gamma) cpm <10,000K

16) Survey Reading (Alpha) cpm <BKG

17) Activity Conversion 2.571E+6dpsx60s/m/5.08815g=3.03E+06 ± 6.06E+4 dpm/g

18) Remarks Used all to make first dilution 11/7/03 w.g

19) Isotope File Updated by W.G 11/7/03

20) QC Approved SEW 11/13/03

ANALYTICS

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

67125-310

Cs-137 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated in an ionization chamber that was calibrated by the National Physical Laboratory, Teddington, U.K., and is directly traceable to national standards.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Cs-137
ACTIVITY (dps):	2.571 E5
HALF-LIFE:	3.007E1 years
CALIBRATION DATE:	November 3, 2003 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	2.0%

Impurities: γ -impurities <0.1%

5.08815 grams 0.1M HCl solution with 30 μ g/g Cs carrier.

Master Solution ID: P271V90

P O NUMBER: 1992574-0000P, Item 2

SOURCE PREPARED BY:

M. Taskeava
M. Taskeava, Radiochemist

Q A APPROVED:

MM. Muz 11-5-03

Rec'd 11/6/03
5577

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

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

GAMMA
CONTINUING CALIBRATION

Quality Assurance Report. Generated 25-SEP-2007 13:48:28.21

QA Filename : \$DISK1:[GER4.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.004450 Upper Bound : 0.004740

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.004590 Std Deviation : 0.000048

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		0.0046		
3-SEP-2007 07:05	CHK		0.0046		
4-SEP-2007 05:16	CHK		0.0046		
5-SEP-2007 05:17	CHK		0.0046		
6-SEP-2007 06:16	CHK		0.0046		
7-SEP-2007 06:16	CHK		0.0046		
7-SEP-2007 06:34	CHK		0.0046		
7-SEP-2007 06:49	CHK		0.0046		
8-SEP-2007 08:03	CHK		0.0046		
10-SEP-2007 04:59	CHK		0.0045		
10-SEP-2007 05:15	CHK		0.0045		
11-SEP-2007 04:40	CHK		0.0046		
11-SEP-2007 04:53	CHK		0.0046		
11-SEP-2007 05:05	CHK		0.0046		
12-SEP-2007 04:55	CHK		0.0045	In	
12-SEP-2007 05:09	CHK		0.0046		
12-SEP-2007 05:26	CHK		0.0045		
13-SEP-2007 04:48	CHK		0.0047	In	
14-SEP-2007 04:49	CHK		0.0046		
15-SEP-2007 07:56	CHK		0.0046		
15-SEP-2007 08:11	CHK		0.0045		

15-SEP-2007 08:33	CHK	0.0046			
17-SEP-2007 04:48	CHK	0.0046			
18-SEP-2007 04:40	CHK	0.0046			
18-SEP-2007 04:52	CHK	0.0046			
19-SEP-2007 05:21	CHK ✓	0.0046			
20-SEP-2007 04:53	CHK	0.0046			
21-SEP-2007 04:51	CHK	0.0046			
22-SEP-2007 08:47	CHK	0.0046			
24-SEP-2007 04:49	CHK	0.0047			

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 389.000000 Upper Bound : 590.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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 Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	CHK		490.0916			
3-SEP-2007 07:05	CHK		490.1077			
4-SEP-2007 05:16	CHK		490.1142			
5-SEP-2007 05:17	CHK		490.1633			
6-SEP-2007 06:16	CHK		490.1237			
7-SEP-2007 06:16	CHK		490.1013			
7-SEP-2007 06:34	CHK		490.1314			
7-SEP-2007 06:49	CHK		490.1049			
8-SEP-2007 08:03	CHK		490.1387			
10-SEP-2007 04:59	CHK		490.0919			
10-SEP-2007 05:15	CHK		490.0879			
11-SEP-2007 04:40	CHK		490.0854			
11-SEP-2007 04:53	CHK		490.0594			
11-SEP-2007 05:05	CHK		490.1317			
12-SEP-2007 04:55	CHK		490.0740			
12-SEP-2007 05:09	CHK		490.1349			
12-SEP-2007 05:26	CHK		490.0520			
13-SEP-2007 04:48	CHK		490.0541			
14-SEP-2007 04:49	CHK		490.1475			

15-SEP-2007 07:56	CHK	490.1496			
15-SEP-2007 08:11	CHK	490.1396			
15-SEP-2007 08:33	CHK	490.1266			
17-SEP-2007 04:48	CHK	490.1592			
18-SEP-2007 04:40	CHK	490.1127			
18-SEP-2007 04:52	CHK	490.2057			
19-SEP-2007 05:21	CHK ✓	490.1653			
20-SEP-2007 04:53	CHK	490.1306			
21-SEP-2007 04:51	CHK	490.1505			
22-SEP-2007 08:47	CHK	490.1048			
24-SEP-2007 04:49	CHK	490.0201			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.893128 Std Deviation : 0.015385

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		0.8879		
3-SEP-2007 07:05	CHK		0.8596	In	
4-SEP-2007 05:16	CHK		0.8659		
5-SEP-2007 05:17	CHK		0.8899		
6-SEP-2007 06:16	CHK		0.8568	In	
7-SEP-2007 06:16	CHK		0.8137	Ac	
7-SEP-2007 06:34	CHK		0.8325	Ac	
7-SEP-2007 06:49	CHK		0.8366	Ac	
8-SEP-2007 08:03	CHK		0.8552	In	
10-SEP-2007 04:59	CHK		0.8437	Ac	
10-SEP-2007 05:15	CHK		0.8475	In	

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
11-SEP-2007 04:40	CHK		0.8460	Ac	
11-SEP-2007 04:53	CHK		0.8421	Ac	
11-SEP-2007 05:05	CHK		0.8540	In	

12-SEP-2007 04:55	CHK	0.8426	Ac
12-SEP-2007 05:09	CHK	0.8174	Ac
12-SEP-2007 05:26	CHK	0.8340	Ac
13-SEP-2007 04:48	CHK	0.8505	In
14-SEP-2007 04:49	CHK	0.8529	In
15-SEP-2007 07:56	CHK	0.8426	Ac
15-SEP-2007 08:11	CHK	0.8265	Ac
15-SEP-2007 08:33	CHK	0.8638	
17-SEP-2007 04:48	CHK	0.8550	In
18-SEP-2007 04:40	CHK	0.8390	Ac
18-SEP-2007 04:52	CHK	0.8608	In
19-SEP-2007 05:21	CHK	0.8693	
20-SEP-2007 04:53	CHK	0.8532	In
21-SEP-2007 04:51	CHK	0.8530	In
22-SEP-2007 08:47	CHK	0.8537	In
24-SEP-2007 04:49	CHK	0.8658	

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000777 Upper Bound : 0.000911

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.000844 Std Deviation : 0.000022

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:45	CHK		0.0008	
3-SEP-2007 07:05	CHK		0.0009	
4-SEP-2007 05:16	CHK		0.0009	
5-SEP-2007 05:17	CHK		0.0008	
6-SEP-2007 06:16	CHK		0.0008	
7-SEP-2007 06:16	CHK		0.0009	
7-SEP-2007 06:34	CHK		0.0008	In
7-SEP-2007 06:49	CHK		0.0008	
8-SEP-2007 08:03	CHK		0.0008	
10-SEP-2007 04:59	CHK		0.0008	

10-SEP-2007 05:15	CHK	0.0008			
11-SEP-2007 04:40	CHK	0.0008			
11-SEP-2007 04:53	CHK	0.0009			
11-SEP-2007 05:05	CHK	0.0008			
12-SEP-2007 04:55	CHK	0.0008			
12-SEP-2007 05:09	CHK	0.0008			
12-SEP-2007 05:26	CHK	0.0009			
13-SEP-2007 04:48	CHK	0.0008			
14-SEP-2007 04:49	CHK	0.0008			

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
15-SEP-2007 07:56	CHK		0.0009		
15-SEP-2007 08:11	CHK		0.0008		
15-SEP-2007 08:33	CHK		0.0009		
17-SEP-2007 04:48	CHK		0.0009		
18-SEP-2007 04:40	CHK		0.0008		
18-SEP-2007 04:52	CHK		0.0008		
19-SEP-2007 05:21	CHK ✓		0.0008		
20-SEP-2007 04:53	CHK		0.0009		
21-SEP-2007 04:51	CHK		0.0009		
22-SEP-2007 08:47	CHK		0.0008		
24-SEP-2007 04:49	CHK		0.0008		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5552.000000 Upper Bound : 5752.000000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 5652.350098 Std Deviation : 4.773609

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		5660.6465		
3-SEP-2007 07:05	CHK		5660.6470		

4-SEP-2007 05:16	CHK	5660.2656			
5-SEP-2007 05:17	CHK	5660.7300			
6-SEP-2007 06:16	CHK	5660.6411			
7-SEP-2007 06:16	CHK	5660.7969			
7-SEP-2007 06:34	CHK	5660.5249			
7-SEP-2007 06:49	CHK	5660.8081			
8-SEP-2007 08:03	CHK	5660.8916			
10-SEP-2007 04:59	CHK	5660.8667			
10-SEP-2007 05:15	CHK	5660.7119			
11-SEP-2007 04:40	CHK	5660.3735			
11-SEP-2007 04:53	CHK	5660.2280			
11-SEP-2007 05:05	CHK	5660.3608			
12-SEP-2007 04:55	CHK	5660.4761			
12-SEP-2007 05:09	CHK	5660.5210			
12-SEP-2007 05:26	CHK	5660.2490			
13-SEP-2007 04:48	CHK	5660.2046			
14-SEP-2007 04:49	CHK	5660.7300			
15-SEP-2007 07:56	CHK	5660.9941			
15-SEP-2007 08:11	CHK	5660.8950			
15-SEP-2007 08:33	CHK	5660.9009			
17-SEP-2007 04:48	CHK	5661.1499			
18-SEP-2007 04:40	CHK	5661.1035			
18-SEP-2007 04:52	CHK	5661.1123			
19-SEP-2007 05:21	CHK	5661.2451			
20-SEP-2007 04:53	CHK	5660.7769			

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
21-SEP-2007 04:51	CHK		5660.9600		
22-SEP-2007 08:47	CHK		5660.9272		
24-SEP-2007 04:49	CHK		5661.0239		

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.907706 Std Deviation : 0.111036

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:45	CHK		2.0120	
3-SEP-2007 07:05	CHK		1.7820	
4-SEP-2007 05:16	CHK		2.0199	
5-SEP-2007 05:17	CHK		1.9332	
6-SEP-2007 06:16	CHK		1.9944	
7-SEP-2007 06:16	CHK		1.7998	
7-SEP-2007 06:34	CHK		2.0144	
7-SEP-2007 06:49	CHK		2.0732	
8-SEP-2007 08:03	CHK		1.9833	
10-SEP-2007 04:59	CHK		1.9220	
10-SEP-2007 05:15	CHK		2.1521	In
11-SEP-2007 04:40	CHK		1.7948	
11-SEP-2007 04:53	CHK		1.9498	
11-SEP-2007 05:05	CHK		1.9799	
12-SEP-2007 04:55	CHK		2.0009	
12-SEP-2007 05:09	CHK		1.9630	
12-SEP-2007 05:26	CHK		2.2328	In
13-SEP-2007 04:48	CHK		2.0099	
14-SEP-2007 04:49	CHK		2.0025	
15-SEP-2007 07:56	CHK		2.0913	
15-SEP-2007 08:11	CHK		2.0376	
15-SEP-2007 08:33	CHK		2.0600	
17-SEP-2007 04:48	CHK		2.1557	In
18-SEP-2007 04:40	CHK		2.1620	In
18-SEP-2007 04:52	CHK		1.9686	
19-SEP-2007 05:21	CHK ✓		2.1725	In
20-SEP-2007 04:53	CHK		1.7798	
21-SEP-2007 04:51	CHK		2.0265	
22-SEP-2007 08:47	CHK		1.8544	
24-SEP-2007 04:49	CHK		2.0081	

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001247 Upper Bound : 0.001497

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.001372 Std Deviation : 0.000042

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

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Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

1-SEP-2007 08:45	CHK		0.0013	In
3-SEP-2007 07:05	CHK		0.0013	
4-SEP-2007 05:16	CHK		0.0013	
5-SEP-2007 05:17	CHK		0.0013	
6-SEP-2007 06:16	CHK		0.0014	
7-SEP-2007 06:16	CHK		0.0013	
7-SEP-2007 06:34	CHK		0.0014	
7-SEP-2007 06:49	CHK		0.0014	
8-SEP-2007 08:03	CHK		0.0014	
10-SEP-2007 04:59	CHK		0.0014	
10-SEP-2007 05:15	CHK		0.0013	
11-SEP-2007 04:40	CHK		0.0014	
11-SEP-2007 04:53	CHK		0.0014	
11-SEP-2007 05:05	CHK		0.0014	
12-SEP-2007 04:55	CHK		0.0014	
12-SEP-2007 05:09	CHK		0.0013	In
12-SEP-2007 05:26	CHK		0.0013	
13-SEP-2007 04:48	CHK		0.0014	
14-SEP-2007 04:49	CHK		0.0013	
15-SEP-2007 07:56	CHK		0.0014	
15-SEP-2007 08:11	CHK		0.0013	
15-SEP-2007 08:33	CHK		0.0014	
17-SEP-2007 04:48	CHK		0.0014	
18-SEP-2007 04:40	CHK		0.0014	
18-SEP-2007 04:52	CHK		0.0013	
19-SEP-2007 05:21	CHK		0.0014	
20-SEP-2007 04:53	CHK		0.0014	
21-SEP-2007 04:51	CHK		0.0014	
22-SEP-2007 08:47	CHK		0.0014	
24-SEP-2007 04:49	CHK		0.0014	

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3027.000000 Upper Bound : 3227.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		3132.0876		
3-SEP-2007 07:05	CHK		3132.1672		
4-SEP-2007 05:16	CHK		3131.9705		
5-SEP-2007 05:17	CHK		3132.2346		
6-SEP-2007 06:16	CHK		3132.0474		
7-SEP-2007 06:16	CHK		3132.1340		
7-SEP-2007 06:34	CHK		3131.9578		
7-SEP-2007 06:49	CHK		3132.2935		
8-SEP-2007 08:03	CHK		3132.1250		
10-SEP-2007 04:59	CHK		3132.2615		
10-SEP-2007 05:15	CHK		3132.0237		
11-SEP-2007 04:40	CHK		3132.0264		
11-SEP-2007 04:53	CHK		3131.9102		
11-SEP-2007 05:05	CHK		3131.9641		

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
12-SEP-2007 04:55	CHK		3132.0637		
12-SEP-2007 05:09	CHK		3131.7585		
12-SEP-2007 05:26	CHK		3132.0056		
13-SEP-2007 04:48	CHK		3131.9443		
14-SEP-2007 04:49	CHK		3132.0063		
15-SEP-2007 07:56	CHK		3132.1509		
15-SEP-2007 08:11	CHK		3132.3757		
15-SEP-2007 08:33	CHK		3132.1531		
17-SEP-2007 04:48	CHK		3132.2898		
18-SEP-2007 04:40	CHK		3131.8774		
18-SEP-2007 04:52	CHK		3132.2976		
19-SEP-2007 05:21	CHK		3132.1948		
20-SEP-2007 04:53	CHK		3132.3105		
21-SEP-2007 04:51	CHK		3132.0898		
22-SEP-2007 08:47	CHK		3132.3582		
24-SEP-2007 04:49	CHK		3132.0110		

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.229000 Upper Bound : 1.682500

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 1.459200 Std Deviation : 0.076591

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		1.4777		
3-SEP-2007 07:05	CHK		1.5447		
4-SEP-2007 05:16	CHK		1.4950		
5-SEP-2007 05:17	CHK		1.3978		
6-SEP-2007 06:16	CHK		1.6264	In	
7-SEP-2007 06:16	CHK		1.3757		
7-SEP-2007 06:34	CHK		1.4068		
7-SEP-2007 06:49	CHK		1.4965		
8-SEP-2007 08:03	CHK		1.4821		
10-SEP-2007 04:59	CHK		1.4602		
10-SEP-2007 05:15	CHK		1.2741	In	
11-SEP-2007 04:40	CHK		1.4709		
11-SEP-2007 04:53	CHK		1.5383		
11-SEP-2007 05:05	CHK		1.6025		
12-SEP-2007 04:55	CHK		1.5417		
12-SEP-2007 05:09	CHK		1.5815		
12-SEP-2007 05:26	CHK		1.3955		
13-SEP-2007 04:48	CHK		1.4890		
14-SEP-2007 04:49	CHK		1.3825		
15-SEP-2007 07:56	CHK		1.3327		
15-SEP-2007 08:11	CHK		1.5326		
15-SEP-2007 08:33	CHK		1.5251		

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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17-SEP-2007 04:48	CHK	1.4503	
18-SEP-2007 04:40	CHK	1.6175	In
18-SEP-2007 04:52	CHK	1.4759	
19-SEP-2007 05:21	CHK ✓	1.6394	In
20-SEP-2007 04:53	CHK	1.6296	In
21-SEP-2007 04:51	CHK	1.4666	
22-SEP-2007 08:47	CHK	1.3749	
24-SEP-2007 04:49	CHK	1.5609	

Quality Assurance Report. Generated 25-SEP-2007 13:48:30.40

QA Filename : \$DISK1:[GER4.QA]BKG.QAF;1

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.150000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.122391 Std Deviation : 0.002587

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
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2-SEP-2007 07:27	BKG		0.1248	
9-SEP-2007 06:53	BKG		0.1266	
16-SEP-2007 07:28	BKG		0.1265	
23-SEP-2007 07:56	BKG		0.1197	

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.100000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 0.084948 Std Deviation : 0.002180

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	BKG		0.0875		
9-SEP-2007 06:53	BKG		0.0879		
16-SEP-2007 07:28	BKG		0.0867		
23-SEP-2007 07:56	BKG		0.0859		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.040000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 0.041480 Std Deviation : 0.002252

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	BKG		0.0440	Ab	
9-SEP-2007 06:53	BKG		0.0398		
16-SEP-2007 07:28	BKG		0.0429	Ab	
23-SEP-2007 07:56	BKG		0.0388		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.048930

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.049604 Std Deviation : 0.002263

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	BKG		0.0447	In	
9-SEP-2007 06:53	BKG		0.0514	Ab	
16-SEP-2007 07:28	BKG		0.0508	Ab	
23-SEP-2007 07:56	BKG		0.0519	Ab	

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.063160

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.064123 Std Deviation : 0.001975

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	BKG		0.0693	Ab In	
9-SEP-2007 06:53	BKG		0.0635	Ab	
16-SEP-2007 07:28	BKG		0.0649	Ab	
23-SEP-2007 07:56	BKG		0.0649	Ab	

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.069915

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.071118 Std Deviation : 0.002091

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	BKG		0.0757	Ab In	
9-SEP-2007 06:53	BKG		0.0709	Ab	
16-SEP-2007 07:28	BKG		0.0723	Ab	
23-SEP-2007 07:56	BKG		0.0719	Ab	

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.061075

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.061972 Std Deviation : 0.002045

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	BKG		0.0649	Ab	
9-SEP-2007 06:53	BKG		0.0640	Ab	
16-SEP-2007 07:28	BKG		0.0637	Ab	
23-SEP-2007 07:56	BKG		0.0601		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM

Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.117970

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.121248 Std Deviation : 0.002298

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	BKG		0.1260	Ab In	
9-SEP-2007 06:53	BKG		0.1275	Ab In	
16-SEP-2007 07:28	BKG		0.1223	Ab	
23-SEP-2007 07:56	BKG		0.1198	Ab	

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM

Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.082060

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.090999 Std Deviation : 0.002667

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	BKG		0.0944	Ab	
9-SEP-2007 06:53	BKG		0.0958	Ab	
16-SEP-2007 07:28	BKG		0.0956	Ab	
23-SEP-2007 07:56	BKG		0.0954	Ab	

Quality Assurance Multi-Test Full Report (continued) Page : 4

see Lab's email response

-- Multi-Test Full Report --

Description : MDA/Ra-228 CPM
Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.068095

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.072553 Std Deviation : 0.002424

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	BKG		0.0758	Ab	
9-SEP-2007 06:53	BKG		0.0707	Ab	
16-SEP-2007 07:28	BKG		0.0744	Ab	
23-SEP-2007 07:56	BKG		0.0738	Ab	

-- Multi-Test Full Report --

Description : MDA U-235 CPM
Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.097155

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.098581 Std Deviation : 0.002421

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	BKG		0.1018	Ab	
9-SEP-2007 06:53	BKG		0.0971		
16-SEP-2007 07:28	BKG		0.1029	Ab	
23-SEP-2007 07:56	BKG		0.0964		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.699390

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 0.714551 Std Deviation : 0.030294

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	BKG		0.7517	Ab	
9-SEP-2007 06:53	BKG		0.6586		
16-SEP-2007 07:28	BKG		0.6622		
23-SEP-2007 07:56	BKG		0.7395	Ab	

Quality Assurance Report.

Generated 25-SEP-2007 13:50:43.54

QA Filename : RDND06::RDND06\$DKA100:[GER5.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.004930 Upper Bound : 0.005230

Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 7 M Slope Samples: 7

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.005084 Std Deviation : 0.000051

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	chk		0.0052	In	
3-SEP-2007 07:05	chk		0.0050		
4-SEP-2007 05:16	chk		0.0050		
4-SEP-2007 05:27	chk		0.0050		
5-SEP-2007 05:17	chk		0.0050		
6-SEP-2007 06:17	chk		0.0051		
7-SEP-2007 06:17	chk		0.0052	In	
7-SEP-2007 06:34	chk		0.0051		
8-SEP-2007 08:04	chk		0.0051		
10-SEP-2007 04:59	chk		0.0052		
11-SEP-2007 04:41	chk		0.0050	In	
12-SEP-2007 04:55	chk		0.0052		
13-SEP-2007 04:48	chk		0.0051		
14-SEP-2007 04:59	chk		0.0050		
15-SEP-2007 07:57	chk		0.0051		
17-SEP-2007 04:48	chk		0.0051		
18-SEP-2007 05:08	chk		0.0051		
19-SEP-2007 05:21	chk ✓		0.0050		

20-SEP-2007 04:53	chk	0.0051			
21-SEP-2007 04:51	chk	0.0051			
22-SEP-2007 08:47	chk	0.0052			
24-SEP-2007 04:49	chk	0.0051			

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 389.500000 Upper Bound : 590.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:46	chk		489.9255					
3-SEP-2007 07:05	chk		489.8599					

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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4-SEP-2007 05:16	chk		489.9237					
4-SEP-2007 05:27	chk		489.9344					
5-SEP-2007 05:17	chk		489.9388					
6-SEP-2007 06:17	chk		489.9300					
7-SEP-2007 06:17	chk		489.9129					
7-SEP-2007 06:34	chk		489.8969					
8-SEP-2007 08:04	chk		489.8866					
10-SEP-2007 04:59	chk		489.8204					
11-SEP-2007 04:41	chk		489.8793					
12-SEP-2007 04:55	chk		489.8342					
13-SEP-2007 04:48	chk		489.8978					
14-SEP-2007 04:59	chk		489.8949					
15-SEP-2007 07:57	chk		489.8589					
17-SEP-2007 04:48	chk		489.9236					
18-SEP-2007 05:08	chk		489.9181					
19-SEP-2007 05:21	chk		489.8461					
20-SEP-2007 04:53	chk		489.8359					
21-SEP-2007 04:51	chk		489.8556					
22-SEP-2007 08:47	chk		489.8732					
24-SEP-2007 04:49	chk		489.8065					

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.945850 Std Deviation : 0.015596

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	chk		0.9187		
3-SEP-2007 07:05	chk		0.9360		
4-SEP-2007 05:16	chk		0.8812	Ac	
4-SEP-2007 05:27	chk		0.9304		
5-SEP-2007 05:17	chk		0.9288		
6-SEP-2007 06:17	chk		0.9615		
7-SEP-2007 06:17	chk		0.9109	In	
7-SEP-2007 06:34	chk		0.9283		
8-SEP-2007 08:04	chk		0.9462		
10-SEP-2007 04:59	chk		0.9303		
11-SEP-2007 04:41	chk		0.9024	In	
12-SEP-2007 04:55	chk		0.9118	In	
13-SEP-2007 04:48	chk		0.9405		
14-SEP-2007 04:59	chk		0.9081	In	
15-SEP-2007 07:57	chk		0.9100	In	
17-SEP-2007 04:48	chk		0.9537		
18-SEP-2007 05:08	chk		0.9391		
19-SEP-2007 05:21	chk		0.9417		
20-SEP-2007 04:53	chk		0.9502		
21-SEP-2007 04:51	chk		0.9285		
22-SEP-2007 08:47	chk		0.9398		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
24-SEP-2007 04:49	chk		0.9522		

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000681 Upper Bound : 0.000781

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.000731 Std Deviation : 0.000017

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	chk		0.0008		
3-SEP-2007 07:05	chk		0.0007		
4-SEP-2007 05:16	chk		0.0007		
4-SEP-2007 05:27	chk		0.0007		
5-SEP-2007 05:17	chk		0.0007		
6-SEP-2007 06:17	chk		0.0007		
7-SEP-2007 06:17	chk		0.0008	Ab Ac	
7-SEP-2007 06:34	chk		0.0007		
8-SEP-2007 08:04	chk		0.0007		
10-SEP-2007 04:59	chk		0.0007		
11-SEP-2007 04:41	chk		0.0007		
12-SEP-2007 04:55	chk		0.0007		
13-SEP-2007 04:48	chk		0.0007		
14-SEP-2007 04:59	chk		0.0007		
15-SEP-2007 07:57	chk		0.0007		
17-SEP-2007 04:48	chk		0.0007		
18-SEP-2007 05:08	chk		0.0007		
19-SEP-2007 05:21	chk		0.0007		
20-SEP-2007 04:53	chk		0.0007		
21-SEP-2007 04:51	chk		0.0007		
22-SEP-2007 08:47	chk		0.0007		
24-SEP-2007 04:49	chk		0.0007		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5544.399902 Upper Bound : 5744.399902

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	chk		5649.1025		
3-SEP-2007 07:05	chk		5648.6001		
4-SEP-2007 05:16	chk		5648.5938		
4-SEP-2007 05:27	chk		5648.6875		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
5-SEP-2007 05:17	chk		5648.8101		
6-SEP-2007 06:17	chk		5648.7085		
7-SEP-2007 06:17	chk		5648.7295		
7-SEP-2007 06:34	chk		5648.8101		
8-SEP-2007 08:04	chk		5648.7271		
10-SEP-2007 04:59	chk		5648.7222		
11-SEP-2007 04:41	chk		5648.2949		
12-SEP-2007 04:55	chk		5648.6724		
13-SEP-2007 04:48	chk		5648.4272		
14-SEP-2007 04:59	chk		5648.6357		
15-SEP-2007 07:57	chk		5648.7832		
17-SEP-2007 04:48	chk		5648.5854		
18-SEP-2007 05:08	chk		5648.5137		
19-SEP-2007 05:21	chk		5648.4888		
20-SEP-2007 04:53	chk		5648.4878		
21-SEP-2007 04:51	chk		5648.5132		
22-SEP-2007 08:47	chk		5648.4292		
24-SEP-2007 04:49	chk		5648.3613		

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.887466 Std Deviation : 0.118246

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	chk		1.7574		

3-SEP-2007 07:05	chk	1.6296	In	
4-SEP-2007 05:16	chk	1.9994		
4-SEP-2007 05:27	chk	1.9648		
5-SEP-2007 05:17	chk	1.7854		
6-SEP-2007 06:17	chk	1.6777		
7-SEP-2007 06:17	chk	1.8605		
7-SEP-2007 06:34	chk	1.9640		
8-SEP-2007 08:04	chk	1.9200		
10-SEP-2007 04:59	chk	1.7442		
11-SEP-2007 04:41	chk	1.7503		
12-SEP-2007 04:55	chk	1.7044		
13-SEP-2007 04:48	chk	1.6525		
14-SEP-2007 04:59	chk	1.8161		
15-SEP-2007 07:57	chk	1.6751		
17-SEP-2007 04:48	chk	1.9985		
18-SEP-2007 05:08	chk	1.8432		
19-SEP-2007 05:21	chk	1.7807		
20-SEP-2007 04:53	chk	1.7049		
21-SEP-2007 04:51	chk	1.9216		
22-SEP-2007 08:47	chk	1.6457	In	
24-SEP-2007 04:49	chk	1.7134		

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001110 Upper Bound : 0.001330

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.001220 Std Deviation : 0.000036

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	chk		0.0012		

3-SEP-2007 07:05	chk	0.0012			
4-SEP-2007 05:16	chk	0.0012			
4-SEP-2007 05:27	chk	0.0012			
5-SEP-2007 05:17	chk	0.0012			
6-SEP-2007 06:17	chk	0.0012			
7-SEP-2007 06:17	chk	0.0012			
7-SEP-2007 06:34	chk	0.0013			
8-SEP-2007 08:04	chk	0.0012			
10-SEP-2007 04:59	chk	0.0011		In	
11-SEP-2007 04:41	chk	0.0013			
12-SEP-2007 04:55	chk	0.0012			
13-SEP-2007 04:48	chk	0.0013			
14-SEP-2007 04:59	chk	0.0013			
15-SEP-2007 07:57	chk	0.0011		In	
17-SEP-2007 04:48	chk	0.0012			
18-SEP-2007 05:08	chk	0.0012			
19-SEP-2007 05:21	chk	0.0013		In	
20-SEP-2007 04:53	chk	0.0012			
21-SEP-2007 04:51	chk	0.0013			
22-SEP-2007 08:47	chk	0.0012			
24-SEP-2007 04:49	chk	0.0012			

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3023.000000 Upper Bound : 3223.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:46	chk	3125.6570						
3-SEP-2007 07:05	chk	3125.6929						
4-SEP-2007 05:16	chk	3125.3594						
4-SEP-2007 05:27	chk	3125.3789						
5-SEP-2007 05:17	chk	3125.6946						
6-SEP-2007 06:17	chk	3125.6045						
7-SEP-2007 06:17	chk	3125.5149						
7-SEP-2007 06:34	chk	3125.5103						
8-SEP-2007 08:04	chk	3125.7214						
10-SEP-2007 04:59	chk	3125.6768						
11-SEP-2007 04:41	chk	3125.6643						

12-SEP-2007 04:55	chk	3125.7659			
13-SEP-2007 04:48	chk	3125.5688			
14-SEP-2007 04:59	chk	3125.6372			
15-SEP-2007 07:57	chk	3125.8279			
17-SEP-2007 04:48	chk	3125.6042			
18-SEP-2007 05:08	chk	3125.4316			
19-SEP-2007 05:21	chk	3125.3374			
20-SEP-2007 04:53	chk	3125.5906			
21-SEP-2007 04:51	chk	3125.4976			
22-SEP-2007 08:47	chk	3125.6121			
24-SEP-2007 04:49	chk	3125.5930			

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.469521 Std Deviation : 0.081560

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:46	chk	1.3075			
3-SEP-2007 07:05	chk	1.4589			
4-SEP-2007 05:16	chk	1.4739			
4-SEP-2007 05:27	chk	1.4422			
5-SEP-2007 05:17	chk	1.6186			
6-SEP-2007 06:17	chk	1.3906			
7-SEP-2007 06:17	chk	1.4145			
7-SEP-2007 06:34	chk	1.4646			
8-SEP-2007 08:04	chk	1.4263			
10-SEP-2007 04:59	chk	1.4918			
11-SEP-2007 04:41	chk	1.4611			
12-SEP-2007 04:55	chk	1.5731			
13-SEP-2007 04:48	chk	1.5090			
14-SEP-2007 04:59	chk	1.4664			

15-SEP-2007 07:57	chk	1.3980	
17-SEP-2007 04:48	chk	1.4593	
18-SEP-2007 05:08	chk	1.4097	
19-SEP-2007 05:21	chk	1.2881	In
20-SEP-2007 04:53	chk	1.4329	
21-SEP-2007 04:51	chk	1.4223	
22-SEP-2007 08:47	chk	1.3887	
24-SEP-2007 04:49	chk	1.5276	

Quality Assurance Report. Generated 25-SEP-2007 13:50:51.58

QA Filename : RDND06::RDND06\$DKA100:[GER5.QA]BKG.QAF;1

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.093447 Std Deviation : 0.006895

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.1064		
9-SEP-2007 06:54	BKG		0.1123	In	
16-SEP-2007 07:30	BKG		0.1028		
23-SEP-2007 07:57	BKG		0.1081	In	

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.089402 Std Deviation : 0.002846

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0949		
9-SEP-2007 06:54	BKG		0.0959	In	
16-SEP-2007 07:30	BKG		0.0899		
23-SEP-2007 07:57	BKG		0.0914		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.038932 Std Deviation : 0.001917

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0400		
9-SEP-2007 06:54	BKG		0.0375		
16-SEP-2007 07:30	BKG		0.0365		
23-SEP-2007 07:57	BKG		0.0402		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.045529 Std Deviation : 0.001757

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0442		

9-SEP-2007 06:54 BKG 0.0477 | | |
 16-SEP-2007 07:30 BKG 0.0471 | | |
 23-SEP-2007 07:57 BKG 0.0463 | | |

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.062721 Std Deviation : 0.002375

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0643		
9-SEP-2007 06:54	BKG		0.0681	In	
16-SEP-2007 07:30	BKG		0.0641		
23-SEP-2007 07:57	BKG		0.0652		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.069156 Std Deviation : 0.001803

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0694		
9-SEP-2007 06:54	BKG		0.0727		
16-SEP-2007 07:30	BKG		0.0694		
23-SEP-2007 07:57	BKG		0.0710		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.061022 Std Deviation : 0.002350

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:28	BKG		0.0619		
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Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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9-SEP-2007 06:54	BKG		0.0628		
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16-SEP-2007 07:30	BKG		0.0619		
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23-SEP-2007 07:57	BKG		0.0625		
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-- Multi-Test Full Report --

Description : MDA Pb-212 CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.127906 Std Deviation : 0.004372

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:28	BKG		0.1356		
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9-SEP-2007 06:54	BKG		0.1373	In	
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16-SEP-2007 07:30	BKG		0.1295		
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23-SEP-2007 07:57	BKG		0.1381	In	
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-- Multi-Test Full Report --

Description : MDA Ra-226 CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.078132 Std Deviation : 0.004366

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0874	In	
9-SEP-2007 06:54	BKG		0.0878	In	
16-SEP-2007 07:30	BKG		0.0815		
23-SEP-2007 07:57	BKG		0.0876	In	

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.063901 Std Deviation : 0.003079

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0691		
9-SEP-2007 06:54	BKG		0.0672		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
16-SEP-2007 07:30	BKG		0.0678		
23-SEP-2007 07:57	BKG		0.0706	In	

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.115846 Std Deviation : 0.005027

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.1247		
9-SEP-2007 06:54	BKG		0.1253		
16-SEP-2007 07:30	BKG		0.1182		
23-SEP-2007 07:57	BKG		0.1284	In	

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.747467 Std Deviation : 0.022446

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.8029	In	
9-SEP-2007 06:54	BKG		0.7963	In	
16-SEP-2007 07:30	BKG		0.7447		
23-SEP-2007 07:57	BKG		0.8023	In	

Quality Assurance Report. Generated 25-SEP-2007 13:48:55.13

QA Filename : \$DISK1:[GER6.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.005600 Upper Bound : 0.006100

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.005903 Std Deviation : 0.000059

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		0.0059		
3-SEP-2007 07:05	chk		0.0060	In	
4-SEP-2007 05:16	chk		0.0059		
4-SEP-2007 05:28	chk		0.0058		
5-SEP-2007 05:34	chk		0.0058		
5-SEP-2007 05:46	chk		0.0058		
6-SEP-2007 06:16	chk		0.0060	In	
7-SEP-2007 06:16	chk		0.0058		
8-SEP-2007 08:03	chk		0.0059		
10-SEP-2007 04:59	chk		0.0060		
11-SEP-2007 04:41	chk		0.0059		
12-SEP-2007 04:56	chk		0.0059		
12-SEP-2007 05:09	chk		0.0060		
13-SEP-2007 04:48	chk		0.0059		
14-SEP-2007 04:49	chk		0.0058		
15-SEP-2007 07:57	chk		0.0059		
15-SEP-2007 08:12	chk		0.0059		
17-SEP-2007 04:48	chk		0.0060		
18-SEP-2007 05:15	chk		0.0059		
19-SEP-2007 05:21	chk		0.0059		
20-SEP-2007 04:53	chk		0.0058		

21-SEP-2007 04:51	chk	0.0059			
21-SEP-2007 05:05	chk	0.0059			
21-SEP-2007 05:30	chk	0.0059			
22-SEP-2007 08:47	chk	0.0059			
22-SEP-2007 08:59	chk	0.0059			
22-SEP-2007 09:11	chk	0.0060			
24-SEP-2007 04:49	chk	0.0059			

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid

Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 386.000000 Upper Bound : 586.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk	488.1690			
3-SEP-2007 07:05	chk	488.0864			
4-SEP-2007 05:16	chk	488.2636			
4-SEP-2007 05:28	chk	488.2724			
5-SEP-2007 05:34	chk	488.2014			
5-SEP-2007 05:46	chk	488.1729			
6-SEP-2007 06:16	chk	488.0614			
7-SEP-2007 06:16	chk	488.0975			
8-SEP-2007 08:03	chk	488.0399			
10-SEP-2007 04:59	chk	487.9230			
11-SEP-2007 04:41	chk	487.9758			
12-SEP-2007 04:56	chk	488.0017			
12-SEP-2007 05:09	chk	488.0114			
13-SEP-2007 04:48	chk	488.0844			
14-SEP-2007 04:49	chk	488.0361			
15-SEP-2007 07:57	chk	488.0605			
15-SEP-2007 08:12	chk	488.0408			
17-SEP-2007 04:48	chk	488.0784			
18-SEP-2007 05:15	chk	488.0566			
19-SEP-2007 05:21	chk	488.0272			
20-SEP-2007 04:53	chk	488.0179			

21-SEP-2007 04:51	chk	488.0442			
21-SEP-2007 05:05	chk	488.0957			
21-SEP-2007 05:30	chk	488.0233			
22-SEP-2007 08:47	chk	487.9961			
22-SEP-2007 08:59	chk	487.9783			
22-SEP-2007 09:11	chk	487.9643			
24-SEP-2007 04:49	chk	488.0048			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.960000 Upper Bound : 1.080000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.021169 Std Deviation : 0.019690

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk	1.0085			
3-SEP-2007 07:05	chk	1.0357			
4-SEP-2007 05:16	chk	1.0467			
4-SEP-2007 05:28	chk	1.0248			
5-SEP-2007 05:34	chk	1.0204			
5-SEP-2007 05:46	chk	1.0171			
6-SEP-2007 06:16	chk	1.0236			
7-SEP-2007 06:16	chk	1.0019			
8-SEP-2007 08:03	chk	0.9813	In		
10-SEP-2007 04:59	chk	1.0415			

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
11-SEP-2007 04:41	chk	1.0318			
12-SEP-2007 04:56	chk	1.0376			
12-SEP-2007 05:09	chk	1.0590			
13-SEP-2007 04:48	chk	1.0249			
14-SEP-2007 04:49	chk	1.0078			

15-SEP-2007 07:57	chk	1.0721	In	
15-SEP-2007 08:12	chk	1.0376		
17-SEP-2007 04:48	chk	1.0381		
18-SEP-2007 05:15	chk	1.0355		
19-SEP-2007 05:21	chk	1.0416		
20-SEP-2007 04:53	chk	0.9902		
21-SEP-2007 04:51	chk	1.0175		
21-SEP-2007 05:05	chk	0.9985		
21-SEP-2007 05:30	chk	0.9963		
22-SEP-2007 08:47	chk	0.9744	In	
22-SEP-2007 08:59	chk	0.9807	In	
22-SEP-2007 09:11	chk	1.0309		
24-SEP-2007 04:49	chk	1.0032		

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000710 Upper Bound : 0.001100

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.000875 Std Deviation : 0.000056

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		0.0009		
3-SEP-2007 07:05	chk		0.0008		
4-SEP-2007 05:16	chk		0.0006	Be Ac	
4-SEP-2007 05:28	chk		0.0009		
5-SEP-2007 05:34	chk		0.0009		
5-SEP-2007 05:46	chk		0.0008		
6-SEP-2007 06:16	chk		0.0008		
7-SEP-2007 06:16	chk		0.0009		
8-SEP-2007 08:03	chk		0.0009		
10-SEP-2007 04:59	chk		0.0008	In	
11-SEP-2007 04:41	chk		0.0009		
12-SEP-2007 04:56	chk		0.0005	Be Ac	
12-SEP-2007 05:09	chk		0.0009		

13-SEP-2007 04:48	chk	0.0009	
14-SEP-2007 04:49	chk	0.0009	
15-SEP-2007 07:57	chk	0.0007	Be Ac
15-SEP-2007 08:12	chk	0.0009	
17-SEP-2007 04:48	chk	0.0009	
18-SEP-2007 05:15	chk	0.0009	
19-SEP-2007 05:21	chk ✓	0.0009	

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
20-SEP-2007 04:53	chk		0.0009		
21-SEP-2007 04:51	chk		0.0009		
21-SEP-2007 05:05	chk		0.0005	Be Ac	
21-SEP-2007 05:30	chk		0.0007	Be Ac	
22-SEP-2007 08:47	chk		0.0009		
22-SEP-2007 08:59	chk		0.0009		
22-SEP-2007 09:11	chk		0.0009		
24-SEP-2007 04:49	chk		0.0009		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid

Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5541.000000 Upper Bound : 5741.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		5645.9404		
3-SEP-2007 07:05	chk		5646.9814		
4-SEP-2007 05:16	chk		5649.0142		
4-SEP-2007 05:28	chk		5646.6436		
5-SEP-2007 05:34	chk		5646.1523		
5-SEP-2007 05:46	chk		5647.0898		
6-SEP-2007 06:16	chk		5646.0249		
7-SEP-2007 06:16	chk		5645.6641		
8-SEP-2007 08:03	chk		5645.6719		
10-SEP-2007 04:59	chk		5646.0591		
11-SEP-2007 04:41	chk		5645.4868		
12-SEP-2007 04:56	chk		5648.1851		
12-SEP-2007 05:09	chk		5645.4492		

13-SEP-2007 04:48	chk	5645.6616			
14-SEP-2007 04:49	chk	5645.7456			
15-SEP-2007 07:57	chk	5646.0342			
15-SEP-2007 08:12	chk	5646.0933			
17-SEP-2007 04:48	chk	5646.0991			
18-SEP-2007 05:15	chk	5645.9800			
19-SEP-2007 05:21	chk	5645.6587			
20-SEP-2007 04:53	chk	5645.2949			
21-SEP-2007 04:51	chk	5645.8062			
21-SEP-2007 05:05	chk	5648.3403			
21-SEP-2007 05:30	chk	5647.0083			
22-SEP-2007 08:47	chk	5644.9795			
22-SEP-2007 08:59	chk	5645.2993			
22-SEP-2007 09:11	chk	5645.1177			
24-SEP-2007 04:49	chk	5645.8247			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.950000 Upper Bound : 3.110000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 2.532997 Std Deviation : 0.192958

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk		2.8514			
3-SEP-2007 07:05	chk		2.4636			
4-SEP-2007 05:16	chk		2.0666	In		
4-SEP-2007 05:28	chk		3.0885	In		
5-SEP-2007 05:34	chk		3.1019	In		
5-SEP-2007 05:46	chk		2.4862			
6-SEP-2007 06:16	chk		2.4890			

7-SEP-2007 06:16	chk	3.0573	In	
8-SEP-2007 08:03	chk	2.6774		
10-SEP-2007 04:59	chk	2.6131		
11-SEP-2007 04:41	chk	2.7513		
12-SEP-2007 04:56	chk	2.1561		
12-SEP-2007 05:09	chk	2.7304		
13-SEP-2007 04:48	chk	2.6425		
14-SEP-2007 04:49	chk	2.8985		
15-SEP-2007 07:57	chk	2.3454		
15-SEP-2007 08:12	chk	2.5936		
17-SEP-2007 04:48	chk	2.8878		
18-SEP-2007 05:15	chk	2.9363	In	
19-SEP-2007 05:21	chk	2.7599		
20-SEP-2007 04:53	chk	2.8404		
21-SEP-2007 04:51	chk	3.1270	Ab Ac	
21-SEP-2007 05:05	chk	2.0357	In	
21-SEP-2007 05:30	chk	2.2651		
22-SEP-2007 08:47	chk	3.1930	Ab Ac	
22-SEP-2007 08:59	chk	2.8996		
22-SEP-2007 09:11	chk	2.6592		
24-SEP-2007 04:49	chk	3.0588	In	

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001300 Upper Bound : 0.016000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.001477 Std Deviation : 0.000044

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		0.0015		
3-SEP-2007 07:05	chk		0.0015		
4-SEP-2007 05:16	chk		0.0015		
4-SEP-2007 05:28	chk		0.0015		
5-SEP-2007 05:34	chk		0.0015		

5-SEP-2007 05:46	chk	0.0014	In	
6-SEP-2007 06:16	chk	0.0015		
7-SEP-2007 06:16	chk	0.0016	In	
8-SEP-2007 08:03	chk	0.0015		
10-SEP-2007 04:59	chk	0.0014		

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej

11-SEP-2007 04:41	chk		0.0015		
12-SEP-2007 04:56	chk		0.0013	In	
12-SEP-2007 05:09	chk		0.0015		
13-SEP-2007 04:48	chk		0.0015		
14-SEP-2007 04:49	chk		0.0014		
15-SEP-2007 07:57	chk		0.0014	In	
15-SEP-2007 08:12	chk		0.0015		
17-SEP-2007 04:48	chk		0.0014		
18-SEP-2007 05:15	chk		0.0015		
19-SEP-2007 05:21	chk		0.0014		
20-SEP-2007 04:53	chk		0.0015		
21-SEP-2007 04:51	chk		0.0015		
21-SEP-2007 05:05	chk		0.0014		
21-SEP-2007 05:30	chk		0.0015		
22-SEP-2007 08:47	chk		0.0014		
22-SEP-2007 08:59	chk		0.0014		
22-SEP-2007 09:11	chk		0.0016		
24-SEP-2007 04:49	chk		0.0015		

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3020.000000 Upper Bound : 3220.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej

1-SEP-2007 08:45	chk		3123.3296		
3-SEP-2007 07:05	chk		3123.6099		
4-SEP-2007 05:16	chk		3123.7209		
4-SEP-2007 05:28	chk		3124.3611		
5-SEP-2007 05:34	chk		3123.8445		

5-SEP-2007 05:46	chk	3123.7363	
6-SEP-2007 06:16	chk	3123.5286	
7-SEP-2007 06:16	chk	3123.2188	
8-SEP-2007 08:03	chk	3123.1931	
10-SEP-2007 04:59	chk	3123.7690	
11-SEP-2007 04:41	chk	3123.1445	
12-SEP-2007 04:56	chk	3123.1436	
12-SEP-2007 05:09	chk	3123.1619	
13-SEP-2007 04:48	chk	3123.5432	
14-SEP-2007 04:49	chk	3123.6538	
15-SEP-2007 07:57	chk	3123.5076	
15-SEP-2007 08:12	chk	3123.6409	
17-SEP-2007 04:48	chk	3123.6611	
18-SEP-2007 05:15	chk	3123.4832	
19-SEP-2007 05:21	chk ✓	3123.1191	
20-SEP-2007 04:53	chk	3123.2046	
21-SEP-2007 04:51	chk	3123.3469	
21-SEP-2007 05:05	chk	3123.7556	
21-SEP-2007 05:30	chk	3123.2148	
22-SEP-2007 08:47	chk	3123.1023	
22-SEP-2007 08:59	chk	3123.3228	

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
22-SEP-2007 09:11	chk		3122.9268	
24-SEP-2007 04:49	chk		3123.3774	

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.495000 Upper Bound : 2.030000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 1.766911 Std Deviation : 0.090562

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
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1-SEP-2007 08:45	chk	1.7712	
3-SEP-2007 07:05	chk	1.9581	In
4-SEP-2007 05:16	chk	1.6837	
4-SEP-2007 05:28	chk	1.8569	
5-SEP-2007 05:34	chk	2.0982	Ab Ac
5-SEP-2007 05:46	chk	1.9579	In
6-SEP-2007 06:16	chk	1.8893	
7-SEP-2007 06:16	chk	1.8418	
8-SEP-2007 08:03	chk	1.9687	In
10-SEP-2007 04:59	chk	1.9347	
11-SEP-2007 04:41	chk	1.8644	
12-SEP-2007 04:56	chk	1.7671	
12-SEP-2007 05:09	chk	1.8724	
13-SEP-2007 04:48	chk	1.7680	
14-SEP-2007 04:49	chk	1.9409	
15-SEP-2007 07:57	chk	2.0650	Ab Ac
15-SEP-2007 08:12	chk	1.8729	
17-SEP-2007 04:48	chk	1.9915	In
18-SEP-2007 05:15	chk	1.8502	
19-SEP-2007 05:21	chk	2.0126	In
20-SEP-2007 04:53	chk	1.9968	In
21-SEP-2007 04:51	chk	1.9114	
21-SEP-2007 05:05	chk	1.8965	
21-SEP-2007 05:30	chk	1.9956	In
22-SEP-2007 08:47	chk	1.8289	
22-SEP-2007 08:59	chk	2.0544	Ab Ac
22-SEP-2007 09:11	chk	1.9949	In
24-SEP-2007 04:49	chk	1.9679	In

Quality Assurance Report.

Generated 25-SEP-2007 13:48:57.03

QA Filename : \$DISK1:[GER6.QA]BKG.QAF;3

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.126556 Std Deviation : 0.016478

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.1127		
9-SEP-2007 06:53	bkg		0.1087		
16-SEP-2007 07:28	bkg		0.1180		
23-SEP-2007 07:56	bkg		0.1091		

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.093709 Std Deviation : 0.044835

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0884		
9-SEP-2007 06:53	bkg		0.0861		
16-SEP-2007 07:28	bkg		0.0877		
23-SEP-2007 07:56	bkg		0.0858		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.045431 Std Deviation : 0.002505

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0464		
9-SEP-2007 06:53	bkg		0.0454		

16-SEP-2007 07:28 bkg 0.0489 | | |
 23-SEP-2007 07:56 bkg 0.0459 | | |

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.054725 Std Deviation : 0.004243

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg			0.0518		
9-SEP-2007 06:53 bkg			0.0551		
16-SEP-2007 07:28 bkg			0.0531		
23-SEP-2007 07:56 bkg			0.0567		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.070487 Std Deviation : 0.032789

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg			0.0673		
9-SEP-2007 06:53 bkg			0.0732		
16-SEP-2007 07:28 bkg			0.0707		
23-SEP-2007 07:56 bkg			0.0691		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 0.074650 Std Deviation : 0.003675

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0743		
9-SEP-2007 06:53	bkg		0.0789		
16-SEP-2007 07:28	bkg		0.0764		
23-SEP-2007 07:56	bkg		0.0756		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 0.065952 Std Deviation : 0.003198

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0649		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
9-SEP-2007 06:53	bkg		0.0662		
16-SEP-2007 07:28	bkg		0.0654		
23-SEP-2007 07:56	bkg		0.0621		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
Mean : 0.120038 Std Deviation : 0.011809

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.1114		
9-SEP-2007 06:53	bkg		0.1095		
16-SEP-2007 07:28	bkg		0.1131		
23-SEP-2007 07:56	bkg		0.1096		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
Mean : 0.092037 Std Deviation : 0.009211

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0884		
9-SEP-2007 06:53	bkg		0.0883		
16-SEP-2007 07:28	bkg		0.0898		
23-SEP-2007 07:56	bkg		0.0875		

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
Mean : 0.072989 Std Deviation : 0.010648

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0662		
9-SEP-2007 06:53	bkg		0.0714		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
16-SEP-2007 07:28	bkg		0.0696		
23-SEP-2007 07:56	bkg		0.0705		

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.108494 Std Deviation : 0.010388

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0980		
9-SEP-2007 06:53	bkg		0.0912		
16-SEP-2007 07:28	bkg		0.0986		
23-SEP-2007 07:56	bkg		0.0957		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.760096 Std Deviation : 0.047420

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg	0.7178			
9-SEP-2007 06:53 bkg	0.7191			
16-SEP-2007 07:28 bkg	0.7337			
23-SEP-2007 07:56 bkg	0.7042			

Quality Assurance Report. Generated 25-SEP-2007 13:48:45.02

QA Filename : \$DISK1:[GER7.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.005842 Upper Bound : 0.006184

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.006013 Std Deviation : 0.000057

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		0.0060		
3-SEP-2007 07:05	CHK		0.0062	In	
4-SEP-2007 05:16	CHK		0.0060		
5-SEP-2007 05:17	CHK		0.0060		
6-SEP-2007 06:16	CHK		0.0060		
7-SEP-2007 06:16	CHK		0.0060		
8-SEP-2007 08:03	CHK		0.0061		
10-SEP-2007 04:59	CHK		0.0060		
11-SEP-2007 04:41	CHK		0.0060		
12-SEP-2007 04:56	CHK		0.0061		
13-SEP-2007 04:48	CHK		0.0060		
14-SEP-2007 04:49	CHK		0.0059		
15-SEP-2007 07:57	CHK		0.0061		
17-SEP-2007 04:48	CHK		0.0060		
18-SEP-2007 04:40	CHK		0.0060		
19-SEP-2007 05:21	CHK ✓		0.0060		
20-SEP-2007 04:53	CHK		0.0061		
21-SEP-2007 04:51	CHK		0.0060		
22-SEP-2007 08:47	CHK		0.0060		
24-SEP-2007 04:49	CHK		0.0059	In	

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid

Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 386.500000 Upper Bound : 586.500000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 486.536133 Std Deviation : 0.719594

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	CHK		486.3427		
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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3-SEP-2007 07:05	CHK		486.3862		
4-SEP-2007 05:16	CHK		486.3602		
5-SEP-2007 05:17	CHK		486.3270		
6-SEP-2007 06:16	CHK		486.3929		
7-SEP-2007 06:16	CHK		486.3875		
8-SEP-2007 08:03	CHK		486.2941		
10-SEP-2007 04:59	CHK		486.3806		
11-SEP-2007 04:41	CHK		486.2720		
12-SEP-2007 04:56	CHK		486.2917		
13-SEP-2007 04:48	CHK		486.3411		
14-SEP-2007 04:49	CHK		486.3550		
15-SEP-2007 07:57	CHK		486.3304		
17-SEP-2007 04:48	CHK		486.3391		
18-SEP-2007 04:40	CHK		486.3185		
19-SEP-2007 05:21	CHK ✓		486.3224		
20-SEP-2007 04:53	CHK		486.3258		
21-SEP-2007 04:51	CHK		486.3412		
22-SEP-2007 08:47	CHK		486.3119		
24-SEP-2007 04:49	CHK		486.3284		

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.025977 Std Deviation : 0.025441

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	CHK		1.0475					
3-SEP-2007 07:05	CHK		0.9948					
4-SEP-2007 05:16	CHK		0.9978					
5-SEP-2007 05:17	CHK		1.0272					
6-SEP-2007 06:16	CHK		0.9866					
7-SEP-2007 06:16	CHK		1.0099					
8-SEP-2007 08:03	CHK		1.0569					
10-SEP-2007 04:59	CHK		1.0053					
11-SEP-2007 04:41	CHK		1.0081					
12-SEP-2007 04:56	CHK		1.0163					
13-SEP-2007 04:48	CHK		1.0099					
14-SEP-2007 04:49	CHK		1.0415					
15-SEP-2007 07:57	CHK		1.0299					
17-SEP-2007 04:48	CHK		1.0274					
18-SEP-2007 04:40	CHK		0.9810					
19-SEP-2007 05:21	CHK		1.0004					
20-SEP-2007 04:53	CHK		1.0264					
21-SEP-2007 04:51	CHK		1.0198					
22-SEP-2007 08:47	CHK		1.0433					
24-SEP-2007 04:49	CHK		1.0270					

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000876 Upper Bound : 0.001030

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.000951 Std Deviation : 0.000025

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

1-SEP-2007 08:45	CHK		0.0009	In	
3-SEP-2007 07:05	CHK		0.0010		
4-SEP-2007 05:16	CHK		0.0009		
5-SEP-2007 05:17	CHK		0.0009		
6-SEP-2007 06:16	CHK		0.0010		
7-SEP-2007 06:16	CHK		0.0010		
8-SEP-2007 08:03	CHK		0.0009		
10-SEP-2007 04:59	CHK		0.0009		
11-SEP-2007 04:41	CHK		0.0010		
12-SEP-2007 04:56	CHK		0.0010		
13-SEP-2007 04:48	CHK		0.0010	In	
14-SEP-2007 04:49	CHK		0.0010		
15-SEP-2007 07:57	CHK		0.0010		
17-SEP-2007 04:48	CHK		0.0010		
18-SEP-2007 04:40	CHK	✓	0.0009		
19-SEP-2007 05:21	CHK		0.0010		
20-SEP-2007 04:53	CHK		0.0009		
21-SEP-2007 04:51	CHK		0.0009		
22-SEP-2007 08:47	CHK		0.0009	In	
24-SEP-2007 04:49	CHK		0.0009		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5528.299805 Upper Bound : 5728.299805

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 5628.259766 Std Deviation : 4.183611

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		5627.7061		
3-SEP-2007 07:05	CHK		5627.9883		
4-SEP-2007 05:16	CHK		5627.7710		
5-SEP-2007 05:17	CHK		5628.2236		
6-SEP-2007 06:16	CHK		5628.0020		
7-SEP-2007 06:16	CHK		5627.9380		
8-SEP-2007 08:03	CHK		5628.3862		
10-SEP-2007 04:59	CHK		5627.9619		
11-SEP-2007 04:41	CHK		5627.8330		
12-SEP-2007 04:56	CHK		5627.8867		
13-SEP-2007 04:48	CHK		5627.7900		
14-SEP-2007 04:49	CHK		5628.1050		
15-SEP-2007 07:57	CHK		5628.2729		
17-SEP-2007 04:48	CHK		5628.4287		
18-SEP-2007 04:40	CHK		5628.5674		
19-SEP-2007 05:21	CHK		5628.1982		
20-SEP-2007 04:53	CHK		5628.2061		
21-SEP-2007 04:51	CHK		5628.2368		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
22-SEP-2007 08:47	CHK		5628.0044		
24-SEP-2007 04:49	CHK		5628.0728		

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.955873 Std Deviation : 0.112134

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		2.0498		
3-SEP-2007 07:05	CHK		1.9697		

4-SEP-2007 05:16	CHK	1.9425			
5-SEP-2007 05:17	CHK	1.9026			
6-SEP-2007 06:16	CHK	1.9847			
7-SEP-2007 06:16	CHK	1.8857			
8-SEP-2007 08:03	CHK	1.8222			
10-SEP-2007 04:59	CHK	2.0781			
11-SEP-2007 04:41	CHK	1.9468			
12-SEP-2007 04:56	CHK	2.0254			
13-SEP-2007 04:48	CHK	1.9471			
14-SEP-2007 04:49	CHK	1.7226		In	
15-SEP-2007 07:57	CHK	2.1038			
17-SEP-2007 04:48	CHK	2.1038			
18-SEP-2007 04:40	CHK	1.7966			
19-SEP-2007 05:21	CHK	2.0447			
20-SEP-2007 04:53	CHK	1.8909			
21-SEP-2007 04:51	CHK	2.1156			
22-SEP-2007 08:47	CHK	1.8539			
24-SEP-2007 04:49	CHK	1.8390			

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001424 Upper Bound : 0.001700

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.001563 Std Deviation : 0.000047

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	CHK		0.0016					
3-SEP-2007 07:05	CHK		0.0015					

Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
4-SEP-2007 05:16	CHK		0.0016					
5-SEP-2007 05:17	CHK		0.0016					

6-SEP-2007 06:16	CHK	0.0015			
7-SEP-2007 06:16	CHK	0.0016			
8-SEP-2007 08:03	CHK	0.0015			
10-SEP-2007 04:59	CHK	0.0015			
11-SEP-2007 04:41	CHK	0.0015			
12-SEP-2007 04:56	CHK	0.0015			
13-SEP-2007 04:48	CHK	0.0015	In		
14-SEP-2007 04:49	CHK	0.0015	In		
15-SEP-2007 07:57	CHK	0.0016			
17-SEP-2007 04:48	CHK	0.0015			
18-SEP-2007 04:40	CHK	0.0015			
19-SEP-2007 05:21	CHK ✓	0.0015	In		
20-SEP-2007 04:53	CHK	0.0015			
21-SEP-2007 04:51	CHK	0.0015			
22-SEP-2007 08:47	CHK	0.0016			
24-SEP-2007 04:49	CHK	0.0015			

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----
 Lower Bound : 3016.000000 Upper Bound : 3216.000000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----
 Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 3115.895020 Std Deviation : 2.002718

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	CHK		3117.0332					
3-SEP-2007 07:05	CHK		3116.9060					
4-SEP-2007 05:16	CHK		3116.6165					
5-SEP-2007 05:17	CHK		3117.2981					
6-SEP-2007 06:16	CHK		3117.3091					
7-SEP-2007 06:16	CHK		3116.9124					
8-SEP-2007 08:03	CHK		3117.1555					
10-SEP-2007 04:59	CHK		3116.8928					
11-SEP-2007 04:41	CHK		3116.8394					
12-SEP-2007 04:56	CHK		3116.7168					

13-SEP-2007 04:48	CHK	3116.8167			
14-SEP-2007 04:49	CHK	3117.1465			
15-SEP-2007 07:57	CHK	3117.1902			
17-SEP-2007 04:48	CHK	3117.2534			
18-SEP-2007 04:40	CHK	3117.2834			
19-SEP-2007 05:21	CHK ✓	3117.3354			
20-SEP-2007 04:53	CHK	3117.1848			
21-SEP-2007 04:51	CHK	3117.0972			
22-SEP-2007 08:47	CHK	3117.3372			
24-SEP-2007 04:49	CHK	3116.9917			

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.537797 Std Deviation : 0.093511

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	CHK	1.5722			
3-SEP-2007 07:05	CHK	1.5608			
4-SEP-2007 05:16	CHK	1.6696			
5-SEP-2007 05:17	CHK	1.4698			
6-SEP-2007 06:16	CHK	1.5264			
7-SEP-2007 06:16	CHK	1.5530			
8-SEP-2007 08:03	CHK	1.4541			
10-SEP-2007 04:59	CHK	1.4367			
11-SEP-2007 04:41	CHK	1.5364			
12-SEP-2007 04:56	CHK	1.6301			
13-SEP-2007 04:48	CHK	1.5504			
14-SEP-2007 04:49	CHK	1.5629			
15-SEP-2007 07:57	CHK	1.4538			
17-SEP-2007 04:48	CHK	1.4321			
18-SEP-2007 04:40	CHK	1.4169			

19-SEP-2007 05:21	CHK ✓	1.4937			
20-SEP-2007 04:53	CHK	1.4348			
21-SEP-2007 04:51	CHK	1.4512			
22-SEP-2007 08:47	CHK	1.5020			
24-SEP-2007 04:49	CHK	1.3386		In	

Quality Assurance Report. Generated 25-SEP-2007 13:48:46.94

QA Filename : \$DISK1:[GER7.QA]BKG.QAF;2

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.089823 Std Deviation : 0.015773

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.1084					
9-SEP-2007 06:53	bkg		0.0812					
16-SEP-2007 07:29	bkg		0.1031					
23-SEP-2007 07:56	bkg		0.1030					

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.081948 Std Deviation : 0.035732

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0893					

9-SEP-2007 06:53 bkg 0.0786 | | |
 16-SEP-2007 07:29 bkg 0.0870 | | |
 23-SEP-2007 07:56 bkg 0.0829 | | |

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.038889 Std Deviation : 0.002277

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0455	In	
9-SEP-2007 06:53	bkg		0.0370		
16-SEP-2007 07:29	bkg		0.0421		
23-SEP-2007 07:56	bkg		0.0406		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.044523 Std Deviation : 0.003292

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0459		
9-SEP-2007 06:53	bkg		0.0412		
16-SEP-2007 07:29	bkg		0.0462		
23-SEP-2007 07:56	bkg		0.0441		

Quality Assurance Multi-Test Full Report (continued) Page : 2

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.061134 Std Deviation : 0.028042

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0642		
9-SEP-2007 06:53	bkg		0.0590		
16-SEP-2007 07:29	bkg		0.0612		
23-SEP-2007 07:56	bkg		0.0596		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.066701 Std Deviation : 0.002973

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0722		
9-SEP-2007 06:53	bkg		0.0655		
16-SEP-2007 07:29	bkg		0.0693		
23-SEP-2007 07:56	bkg		0.0680		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.056570 Std Deviation : 0.002743

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0612		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
9-SEP-2007 06:53	bkg		0.0521		
16-SEP-2007 07:29	bkg		0.0599		
23-SEP-2007 07:56	bkg		0.0593		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.110908 Std Deviation : 0.007831

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.1227		
9-SEP-2007 06:53	bkg		0.1054		
16-SEP-2007 07:29	bkg		0.1173		
23-SEP-2007 07:56	bkg		0.1156		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 0.082481 Std Deviation : 0.008130

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0926		
9-SEP-2007 06:53	bkg		0.0756		
16-SEP-2007 07:29	bkg		0.0909		
23-SEP-2007 07:56	bkg		0.0893		

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.061595 Std Deviation : 0.008794

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0660		
9-SEP-2007 06:53	bkg		0.0590		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
16-SEP-2007 07:29	bkg		0.0654		
23-SEP-2007 07:56	bkg		0.0676		

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.095290 Std Deviation : 0.007263

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg	0.1090			
9-SEP-2007 06:53 bkg	0.0876			
16-SEP-2007 07:29 bkg	0.1020			
23-SEP-2007 07:56 bkg	0.1065			

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 0.677822 Std Deviation : 0.033416

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

2-SEP-2007 07:27 bkg			0.7249			
9-SEP-2007 06:53 bkg			0.6674			
16-SEP-2007 07:29 bkg			0.7265			
23-SEP-2007 07:56 bkg			0.7368			

Quality Assurance Report. Generated 25-SEP-2007 13:49:04.83

QA Filename : \$DISK1:[GER8.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.005600 Upper Bound : 0.005900

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.005744 Std Deviation : 0.000046

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		0.0057					
1-SEP-2007 09:10	chk		0.0058					
3-SEP-2007 07:05	chk		0.0058					
3-SEP-2007 07:19	chk		0.0057					
3-SEP-2007 07:31	chk		0.0057					
4-SEP-2007 05:16	chk		0.0056	In				
5-SEP-2007 05:17	chk		0.0057					
5-SEP-2007 05:35	chk		0.0058					
6-SEP-2007 06:17	chk		0.0057					
7-SEP-2007 06:16	chk		0.0058					
8-SEP-2007 08:04	chk		0.0057					
10-SEP-2007 04:59	chk		0.0058					
10-SEP-2007 05:15	chk		0.0057					
11-SEP-2007 04:59	chk		0.0057					
12-SEP-2007 04:56	chk		0.0058					
13-SEP-2007 04:49	chk		0.0058	In				
14-SEP-2007 04:49	chk		0.0057					
14-SEP-2007 05:01	chk		0.0057					
15-SEP-2007 07:57	chk		0.0057					
15-SEP-2007 08:14	chk		0.0056	In				
15-SEP-2007 08:33	chk		0.0058					

17-SEP-2007 04:48	chk	0.0058			
18-SEP-2007 05:15	chk	0.0057			
19-SEP-2007 05:21	chk	0.0057			
19-SEP-2007 05:33	chk	0.0057			
20-SEP-2007 04:53	chk	0.0058			
20-SEP-2007 05:07	chk	0.0058			
21-SEP-2007 04:51	chk	0.0058			
22-SEP-2007 08:47	chk	0.0057			
22-SEP-2007 09:01	chk	0.0057			
22-SEP-2007 09:26	chk	0.0058			
24-SEP-2007 04:54	chk	0.0058			

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 386.000000 Upper Bound : 586.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk	487.9464			
1-SEP-2007 09:10	chk	487.9090			
3-SEP-2007 07:05	chk	487.9225			
3-SEP-2007 07:19	chk	487.8979			
3-SEP-2007 07:31	chk	487.8323			
4-SEP-2007 05:16	chk	487.9203			
5-SEP-2007 05:17	chk	487.8284			
5-SEP-2007 05:35	chk	487.8421			
6-SEP-2007 06:17	chk	487.9028			
7-SEP-2007 06:16	chk	487.7960			
8-SEP-2007 08:04	chk	487.7401			
10-SEP-2007 04:59	chk	487.7220			
10-SEP-2007 05:15	chk	487.7350			
11-SEP-2007 04:59	chk	488.3040			
12-SEP-2007 04:56	chk	488.3782			
13-SEP-2007 04:49	chk	488.2681			
14-SEP-2007 04:49	chk	488.1769			

14-SEP-2007 05:01	chk	488.2386			
15-SEP-2007 07:57	chk	488.1512			
15-SEP-2007 08:14	chk	488.1677			
15-SEP-2007 08:33	chk	488.1662			
17-SEP-2007 04:48	chk	488.0795			
18-SEP-2007 05:15	chk	488.0611			
19-SEP-2007 05:21	chk	488.0865			
19-SEP-2007 05:33	chk	488.0916			
20-SEP-2007 04:53	chk	488.0414			
20-SEP-2007 05:07	chk	488.0758			
21-SEP-2007 04:51	chk	488.0905			
22-SEP-2007 08:47	chk	488.1018			
22-SEP-2007 09:01	chk	488.0764			
22-SEP-2007 09:26	chk	488.0711			
24-SEP-2007 04:54	chk	488.1234			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.020000 Upper Bound : 1.130000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.078783 Std Deviation : 0.017153

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		1.1410	Ab Ac	
1-SEP-2007 09:10	chk		1.1305	Ab Ac	
3-SEP-2007 07:05	chk		1.1524	Ab Ac	
3-SEP-2007 07:19	chk		1.1418	Ab Ac	
3-SEP-2007 07:31	chk		1.1245	In	
4-SEP-2007 05:16	chk		1.1167	In	

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
5-SEP-2007 05:17	chk		1.1376	Ab Ac	

5-SEP-2007 05:35	chk	1.1230	In	
6-SEP-2007 06:17	chk	1.1056		
7-SEP-2007 06:16	chk	1.1177	In	
8-SEP-2007 08:04	chk	1.1045		
10-SEP-2007 04:59	chk	1.1330	Ab Ac	
10-SEP-2007 05:15	chk	1.0987		
11-SEP-2007 04:59	chk	1.1125		
12-SEP-2007 04:56	chk	1.1250	In	
13-SEP-2007 04:49	chk	1.1199	In	
14-SEP-2007 04:49	chk	1.1328	Ab Ac	
14-SEP-2007 05:01	chk	1.0989		
15-SEP-2007 07:57	chk	1.1312	Ab Ac	
15-SEP-2007 08:14	chk	1.1710	Ab Ac	
15-SEP-2007 08:33	chk	1.1372	Ab Ac	
17-SEP-2007 04:48	chk	1.1213	In	
18-SEP-2007 05:15	chk	1.0927		
19-SEP-2007 05:21	chk	1.1538	Ab Ac	
19-SEP-2007 05:33	chk ✓	1.1067		
20-SEP-2007 04:53	chk	1.1440	Ab Ac	
20-SEP-2007 05:07	chk	1.0961		
21-SEP-2007 04:51	chk	1.1127		
22-SEP-2007 08:47	chk	1.1434	Ab Ac	
22-SEP-2007 09:01	chk	1.1480	Ab Ac	
22-SEP-2007 09:26	chk	1.1273	In	
24-SEP-2007 04:54	chk	1.0872		

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001230 Upper Bound : 0.001460

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.001345 Std Deviation : 0.000038

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

 1-SEP-2007 08:45 chk 0.0013 |||

1-SEP-2007 09:10	chk	0.0014			
3-SEP-2007 07:05	chk	0.0013			
3-SEP-2007 07:19	chk	0.0014			
3-SEP-2007 07:31	chk	0.0013			
4-SEP-2007 05:16	chk	0.0013			
5-SEP-2007 05:17	chk	0.0013			
5-SEP-2007 05:35	chk	0.0014			
6-SEP-2007 06:17	chk	0.0013			
7-SEP-2007 06:16	chk	0.0014		In	
8-SEP-2007 08:04	chk	0.0014			
10-SEP-2007 04:59	chk	0.0013			

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
10-SEP-2007 05:15	chk		0.0013					
11-SEP-2007 04:59	chk		0.0014					
12-SEP-2007 04:56	chk		0.0014					
13-SEP-2007 04:49	chk		0.0014					
14-SEP-2007 04:49	chk		0.0013					
14-SEP-2007 05:01	chk		0.0013					
15-SEP-2007 07:57	chk		0.0013					
15-SEP-2007 08:14	chk		0.0013					
15-SEP-2007 08:33	chk		0.0013					
17-SEP-2007 04:48	chk		0.0014					
18-SEP-2007 05:15	chk		0.0013					
19-SEP-2007 05:21	chk		0.0013					
19-SEP-2007 05:33	chk		0.0013					
20-SEP-2007 04:53	chk		0.0014					
20-SEP-2007 05:07	chk		0.0014					
21-SEP-2007 04:51	chk		0.0013					
22-SEP-2007 08:47	chk		0.0014					
22-SEP-2007 09:01	chk		0.0014					
22-SEP-2007 09:26	chk		0.0014					
24-SEP-2007 04:54	chk		0.0014					

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3012.000000 Upper Bound : 3212.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		3116.9189		
1-SEP-2007 09:10	chk		3116.9963		
3-SEP-2007 07:05	chk		3116.7192		
3-SEP-2007 07:19	chk		3116.7993		
3-SEP-2007 07:31	chk		3116.9382		
4-SEP-2007 05:16	chk		3116.8992		
5-SEP-2007 05:17	chk		3116.6602		
5-SEP-2007 05:35	chk		3116.5974		
6-SEP-2007 06:17	chk		3116.8918		
7-SEP-2007 06:16	chk		3116.5095		
8-SEP-2007 08:04	chk		3116.3901		
10-SEP-2007 04:59	chk		3116.0508		
10-SEP-2007 05:15	chk		3116.1917		
11-SEP-2007 04:59	chk		3118.6318		
12-SEP-2007 04:56	chk		3118.6619		
13-SEP-2007 04:49	chk		3118.4500		
14-SEP-2007 04:49	chk		3118.2939		
14-SEP-2007 05:01	chk		3118.2173		
15-SEP-2007 07:57	chk		3118.2517		
15-SEP-2007 08:14	chk		3118.0889		
15-SEP-2007 08:33	chk		3118.1748		
17-SEP-2007 04:48	chk		3118.0181		
18-SEP-2007 05:15	chk		3118.0354		
19-SEP-2007 05:21	chk		3117.8994		

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
19-SEP-2007 05:33	chk ✓		3117.8254		
20-SEP-2007 04:53	chk		3117.6787		
20-SEP-2007 05:07	chk		3117.7839		
21-SEP-2007 04:51	chk		3117.7065		
22-SEP-2007 08:47	chk		3118.0544		
22-SEP-2007 09:01	chk		3117.8066		
22-SEP-2007 09:26	chk		3118.0168		
24-SEP-2007 04:54	chk		3118.0261		

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution

Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 1.500686 Std Deviation : 0.081807

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		1.6118					
1-SEP-2007 09:10	chk		1.5415					
3-SEP-2007 07:05	chk		1.4801					
3-SEP-2007 07:19	chk		1.5137					
3-SEP-2007 07:31	chk		1.5943					
4-SEP-2007 05:16	chk		1.5012					
5-SEP-2007 05:17	chk		1.5556					
5-SEP-2007 05:35	chk		1.6264					
6-SEP-2007 06:17	chk		1.3864					
7-SEP-2007 06:16	chk		1.4387					
8-SEP-2007 08:04	chk		1.5408					
10-SEP-2007 04:59	chk		1.6467					
10-SEP-2007 05:15	chk		1.4994					
11-SEP-2007 04:59	chk		1.6653	In				
12-SEP-2007 04:56	chk		1.6580					
13-SEP-2007 04:49	chk		1.5058					
14-SEP-2007 04:49	chk		1.6420					
14-SEP-2007 05:01	chk		1.5505					
15-SEP-2007 07:57	chk		1.4771					
15-SEP-2007 08:14	chk		1.4767					
15-SEP-2007 08:33	chk		1.6899	In				
17-SEP-2007 04:48	chk		1.4550					
18-SEP-2007 05:15	chk		1.4736					
19-SEP-2007 05:21	chk		1.5871					
19-SEP-2007 05:33	chk ✓		1.4317					
20-SEP-2007 04:53	chk		1.6328					
20-SEP-2007 05:07	chk		1.5290					
21-SEP-2007 04:51	chk		1.7119	In				
22-SEP-2007 08:47	chk		1.5721					
22-SEP-2007 09:01	chk		1.4014					
22-SEP-2007 09:26	chk		1.4370					
24-SEP-2007 04:54	chk		1.5322					

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000740 Upper Bound : 0.000860

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.000805 Std Deviation : 0.000019

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		0.0008					
1-SEP-2007 09:10	chk		0.0008					
3-SEP-2007 07:05	chk		0.0008					
3-SEP-2007 07:19	chk		0.0008					
3-SEP-2007 07:31	chk		0.0008					
4-SEP-2007 05:16	chk		0.0008					
5-SEP-2007 05:17	chk		0.0008					
5-SEP-2007 05:35	chk		0.0008					
6-SEP-2007 06:17	chk		0.0008					
7-SEP-2007 06:16	chk		0.0008					
8-SEP-2007 08:04	chk		0.0008					
10-SEP-2007 04:59	chk		0.0008					
10-SEP-2007 05:15	chk		0.0008					
11-SEP-2007 04:59	chk		0.0008					
12-SEP-2007 04:56	chk		0.0008					
13-SEP-2007 04:49	chk		0.0008					
14-SEP-2007 04:49	chk		0.0008	In				
14-SEP-2007 05:01	chk		0.0008					
15-SEP-2007 07:57	chk		0.0008					
15-SEP-2007 08:14	chk		0.0008					
15-SEP-2007 08:33	chk		0.0008					
17-SEP-2007 04:48	chk		0.0008					
18-SEP-2007 05:15	chk		0.0008					

19-SEP-2007 05:21	chk	0.0008			
19-SEP-2007 05:33	chk ✓	0.0008			
20-SEP-2007 04:53	chk	0.0008			
20-SEP-2007 05:07	chk	0.0008			
21-SEP-2007 04:51	chk	0.0008	In		
22-SEP-2007 08:47	chk	0.0008			
22-SEP-2007 09:01	chk	0.0008			
22-SEP-2007 09:26	chk	0.0008			
24-SEP-2007 04:54	chk	0.0008			

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5526.000000 Upper Bound : 5726.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk	5633.1323						
1-SEP-2007 09:10	chk	5633.2998						
3-SEP-2007 07:05	chk	5632.9116						
3-SEP-2007 07:19	chk	5632.8784						
3-SEP-2007 07:31	chk	5632.7603						
4-SEP-2007 05:16	chk	5632.8730						
5-SEP-2007 05:17	chk	5632.9102						
5-SEP-2007 05:35	chk	5632.6914						
6-SEP-2007 06:17	chk	5632.7549						
7-SEP-2007 06:16	chk	5632.5391						
8-SEP-2007 08:04	chk	5632.1460						
10-SEP-2007 04:59	chk	5631.9883						

Quality Assurance Multi-Test Full Report (continued) Page : 7

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
10-SEP-2007 05:15	chk	5631.9678						
11-SEP-2007 04:59	chk	5636.4053						
12-SEP-2007 04:56	chk	5636.1475						
13-SEP-2007 04:49	chk	5635.5830						
14-SEP-2007 04:49	chk	5635.4517						
14-SEP-2007 05:01	chk	5635.1802						
15-SEP-2007 07:57	chk	5635.3438						

15-SEP-2007 08:14	chk	5635.1401			
15-SEP-2007 08:33	chk	5635.3042			
17-SEP-2007 04:48	chk	5635.2173			
18-SEP-2007 05:15	chk	5635.0562			
19-SEP-2007 05:21	chk	5634.8296			
19-SEP-2007 05:33	chk	5634.9277			
20-SEP-2007 04:53	chk	5634.7559			
20-SEP-2007 05:07	chk	5634.7749			
21-SEP-2007 04:51	chk	5634.7681			
22-SEP-2007 08:47	chk	5635.0396			
22-SEP-2007 09:01	chk	5634.7798			
22-SEP-2007 09:26	chk	5634.8745			
24-SEP-2007 04:54	chk	5634.9487			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.832282 Std Deviation : 0.100594

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		1.9264					
1-SEP-2007 09:10	chk		1.8205					
3-SEP-2007 07:05	chk		1.6520					
3-SEP-2007 07:19	chk		1.9189					
3-SEP-2007 07:31	chk		1.7867					
4-SEP-2007 05:16	chk		2.0247					
5-SEP-2007 05:17	chk		2.0136					
5-SEP-2007 05:35	chk		1.8916					
6-SEP-2007 06:17	chk		1.9890					
7-SEP-2007 06:16	chk		1.7606					
8-SEP-2007 08:04	chk		2.0999		In			
10-SEP-2007 04:59	chk		1.9953					
10-SEP-2007 05:15	chk		1.7601					
11-SEP-2007 04:59	chk		1.8222					
12-SEP-2007 04:56	chk		1.8041					
13-SEP-2007 04:49	chk		1.9316					

14-SEP-2007 04:49	chk	1.8193			
14-SEP-2007 05:01	chk	1.8518			
15-SEP-2007 07:57	chk	1.6994			
15-SEP-2007 08:14	chk	1.9423			
15-SEP-2007 08:33	chk	1.9839			

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
17-SEP-2007 04:48	chk		1.8350					
18-SEP-2007 05:15	chk		1.9350					
19-SEP-2007 05:21	chk		1.6718					
19-SEP-2007 05:33	chk		1.7888					
20-SEP-2007 04:53	chk		1.8351					
20-SEP-2007 05:07	chk		1.8955					
21-SEP-2007 04:51	chk		1.7759					
22-SEP-2007 08:47	chk		1.7581					
22-SEP-2007 09:01	chk		1.7903					
22-SEP-2007 09:26	chk		2.0320					
24-SEP-2007 04:54	chk		1.9950					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:06.94

QA Filename : \$DISK1:[GER8,QA]BKG.QAF;4

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.061405 Std Deviation : 0.001976

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0574	In				
9-SEP-2007 06:53	bkg		0.0594					
16-SEP-2007 07:29	bkg		0.0570	In				
23-SEP-2007 07:56	bkg		0.0557	In				

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.082875 Std Deviation : 0.002281

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0836		
9-SEP-2007 06:53	bkg		0.0850		
16-SEP-2007 07:29	bkg		0.0817		
23-SEP-2007 07:56	bkg		0.0805		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.035360 Std Deviation : 0.001783

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0340		
9-SEP-2007 06:53	bkg		0.0359		
16-SEP-2007 07:29	bkg		0.0325		
23-SEP-2007 07:56	bkg		0.0364		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.042463 Std Deviation : 0.001348

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	bkg		0.0420		
9-SEP-2007 06:53	bkg		0.0429		
16-SEP-2007 07:29	bkg		0.0394	In	
23-SEP-2007 07:56	bkg		0.0413		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.058281 Std Deviation : 0.002126

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	bkg		0.0572		
9-SEP-2007 06:53	bkg		0.0593		
16-SEP-2007 07:29	bkg		0.0585		
23-SEP-2007 07:56	bkg		0.0583		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.063800 Std Deviation : 0.001741

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0636					
9-SEP-2007 06:53	bkg		0.0653					
16-SEP-2007 07:29	bkg		0.0617					
23-SEP-2007 07:56	bkg		0.0666					

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.054773 Std Deviation : 0.002161

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0553					

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
9-SEP-2007 06:53	bkg		0.0598	In				
16-SEP-2007 07:29	bkg		0.0533					
23-SEP-2007 07:56	bkg		0.0554					

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.106784 Std Deviation : 0.002268

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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2-SEP-2007 07:27 bkg          0.1081  | | |
9-SEP-2007 06:53 bkg          0.1075  | | |
16-SEP-2007 07:29 bkg          0.1078  | | |
23-SEP-2007 07:56 bkg          0.1051  | | |
```

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.081278 Std Deviation : 0.010898

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0803		
9-SEP-2007 06:53	bkg		0.0887		
16-SEP-2007 07:29	bkg		0.0815		
23-SEP-2007 07:56	bkg		0.0893		

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.051167 Std Deviation : 0.001783

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0528		
9-SEP-2007 06:53	bkg		0.0525		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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16-SEP-2007 07:29 bkg 0.0516 | | |
23-SEP-2007 07:56 bkg 0.0526 | | |

-- Multi-Test Full Report --

Description : MDA U-235 CPM
Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
Mean : 0.102046 Std Deviation : 0.002221

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.1001		
9-SEP-2007 06:53	bkg		0.1034		
16-SEP-2007 07:29	bkg		0.1052		
23-SEP-2007 07:56	bkg		0.1001		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
Parameter Units : CPM Parameter Type : Nuclide

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.6881		
9-SEP-2007 06:53	bkg		0.6602		
16-SEP-2007 07:29	bkg		0.6615		
23-SEP-2007 07:56	bkg		0.6634		

Quality Assurance Report. Generated 25-SEP-2007 13:49:21.44

QA Filename : \$DISK1:[GER10.QA]CHECK.QAF;4

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.005400 Upper Bound : 0.005800

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
 Mean : 0.005562 Std Deviation : 0.000056

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:45	chk		0.0056	
3-SEP-2007 07:05	chk		0.0056	
4-SEP-2007 05:31	chk		0.0056	
5-SEP-2007 05:36	chk		0.0056	
6-SEP-2007 06:17	chk		0.0054	In
7-SEP-2007 06:17	chk		0.0055	
8-SEP-2007 08:04	chk		0.0056	
10-SEP-2007 05:17	chk		0.0055	
11-SEP-2007 04:56	chk		0.0056	
12-SEP-2007 05:12	chk		0.0055	
13-SEP-2007 05:08	chk		0.0056	
14-SEP-2007 04:49	chk		0.0055	
15-SEP-2007 07:57	chk		0.0055	
17-SEP-2007 05:06	chk		0.0054	In
18-SEP-2007 04:40	chk		0.0055	
19-SEP-2007 05:36	chk ✓		0.0057	
20-SEP-2007 05:03	chk		0.0055	
21-SEP-2007 05:07	chk		0.0056	
22-SEP-2007 08:47	chk		0.0056	
24-SEP-2007 05:05	chk		0.0056	

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid

Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 329.000000 Upper Bound : 529.000000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00

Mean : 433.161346 Std Deviation : 0.081999

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk	433.3510	In					
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Quality Assurance Multi-Test Full Report (continued)

Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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3-SEP-2007 07:05	chk	433.3080						
4-SEP-2007 05:31	chk	433.2180						
5-SEP-2007 05:36	chk	433.2477						
6-SEP-2007 06:17	chk	433.2935						
7-SEP-2007 06:17	chk	433.2728						
8-SEP-2007 08:04	chk	433.2436						
10-SEP-2007 05:17	chk	433.3057						
11-SEP-2007 04:56	chk	433.2245						
12-SEP-2007 05:12	chk	433.2663						
13-SEP-2007 05:08	chk	433.2282						
14-SEP-2007 04:49	chk	433.2336						
15-SEP-2007 07:57	chk	433.2142						
17-SEP-2007 05:06	chk	433.2497						
18-SEP-2007 04:40	chk	433.2068						
19-SEP-2007 05:36	chk ✓	433.2430						
20-SEP-2007 05:03	chk	433.2849						
21-SEP-2007 05:07	chk	433.3149						
22-SEP-2007 08:47	chk	433.2535						
24-SEP-2007 05:05	chk	433.2771						

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.200000 Upper Bound : 1.450000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00

Mean : 1.409876 Std Deviation : 0.042171

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		1.4670	Ab				
3-SEP-2007 07:05	chk		1.4333					
4-SEP-2007 05:31	chk		1.4012					
5-SEP-2007 05:36	chk		1.4705	Ab				
6-SEP-2007 06:17	chk		1.4257					
7-SEP-2007 06:17	chk		1.4797	Ab				
8-SEP-2007 08:04	chk		1.4730	Ab				
10-SEP-2007 05:17	chk		1.4547	Ab				
11-SEP-2007 04:56	chk		1.4482					
12-SEP-2007 05:12	chk		1.4390					
13-SEP-2007 05:08	chk		1.4570	Ab				
14-SEP-2007 04:49	chk		1.4187					
15-SEP-2007 07:57	chk		1.4078					
17-SEP-2007 05:06	chk		1.4177					
18-SEP-2007 04:40	chk		1.4340					
19-SEP-2007 05:36	chk ✓		1.4078					
20-SEP-2007 05:03	chk		1.4575	Ab				
21-SEP-2007 05:07	chk		1.4231					
22-SEP-2007 08:47	chk		1.3775					

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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24-SEP-2007 05:05	chk		1.4779	Ab				
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-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001250 Upper Bound : 0.001410

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00

Mean : 0.001335 Std Deviation : 0.000024

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		0.0014		
3-SEP-2007 07:05	chk		0.0014		
4-SEP-2007 05:31	chk		0.0013		
5-SEP-2007 05:36	chk		0.0014		
6-SEP-2007 06:17	chk		0.0013		
7-SEP-2007 06:17	chk		0.0013		
8-SEP-2007 08:04	chk		0.0013		
10-SEP-2007 05:17	chk		0.0013		
11-SEP-2007 04:56	chk		0.0014		
12-SEP-2007 05:12	chk		0.0014		
13-SEP-2007 05:08	chk		0.0013		
14-SEP-2007 04:49	chk		0.0013		
15-SEP-2007 07:57	chk		0.0013		
17-SEP-2007 05:06	chk		0.0013		
18-SEP-2007 04:40	chk		0.0013		
19-SEP-2007 05:36	chk		0.0013		
20-SEP-2007 05:03	chk		0.0014		
21-SEP-2007 05:07	chk		0.0013		
22-SEP-2007 08:47	chk		0.0013		
24-SEP-2007 05:05	chk		0.0013		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid

Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5536.000000 Upper Bound : 5737.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk	5634.2837			
3-SEP-2007 07:05	chk	5634.5439			
4-SEP-2007 05:31	chk	5634.0313			
5-SEP-2007 05:36	chk	5634.1538			
6-SEP-2007 06:17	chk	5634.1646			
7-SEP-2007 06:17	chk	5634.4761			

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
8-SEP-2007 08:04	chk		5634.3364					
10-SEP-2007 05:17	chk		5634.6187					
11-SEP-2007 04:56	chk		5634.5142					
12-SEP-2007 05:12	chk		5634.5239					
13-SEP-2007 05:08	chk		5634.2402					
14-SEP-2007 04:49	chk		5634.4180					
15-SEP-2007 07:57	chk		5634.5376					
17-SEP-2007 05:06	chk		5634.5757					
18-SEP-2007 04:40	chk		5634.5620					
19-SEP-2007 05:36	chk		5634.5151					
20-SEP-2007 05:03	chk		5634.4800					
21-SEP-2007 05:07	chk		5634.4775					
22-SEP-2007 08:47	chk		5634.5254					
24-SEP-2007 05:05	chk		5634.7158					

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
 Mean : 2.040116 Std Deviation : 0.097598

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		2.1605					
3-SEP-2007 07:05	chk		2.0598					
4-SEP-2007 05:31	chk		1.8447	In				
5-SEP-2007 05:36	chk		2.0284					
6-SEP-2007 06:17	chk		1.9835					

7-SEP-2007 06:17	chk	2.0752			
8-SEP-2007 08:04	chk	2.1660			
10-SEP-2007 05:17	chk	2.0144			
11-SEP-2007 04:56	chk	1.7909		In	
12-SEP-2007 05:12	chk	2.0762			
13-SEP-2007 05:08	chk	2.0895			
14-SEP-2007 04:49	chk	2.1507			
15-SEP-2007 07:57	chk	2.0815			
17-SEP-2007 05:06	chk	2.0426			
18-SEP-2007 04:40	chk	2.2081			
19-SEP-2007 05:36	chk	1.9085			
20-SEP-2007 05:03	chk	2.0242			
21-SEP-2007 05:07	chk	2.0051			
22-SEP-2007 08:47	chk	2.0669			
24-SEP-2007 05:05	chk	2.1701			

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001870 Upper Bound : 0.002150

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
 Mean : 0.002016 Std Deviation : 0.000049

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk	0.0020			
3-SEP-2007 07:05	chk	0.0019			
4-SEP-2007 05:31	chk	0.0019			
5-SEP-2007 05:36	chk	0.0020			
6-SEP-2007 06:17	chk	0.0021			
7-SEP-2007 06:17	chk	0.0020			
8-SEP-2007 08:04	chk	0.0020			

10-SEP-2007 05:17	chk	0.0021			
11-SEP-2007 04:56	chk	0.0020			
12-SEP-2007 05:12	chk	0.0020			
13-SEP-2007 05:08	chk	0.0020			
14-SEP-2007 04:49	chk	0.0020			
15-SEP-2007 07:57	chk	0.0020			
17-SEP-2007 05:06	chk	0.0019			
18-SEP-2007 04:40	chk	0.0020			
19-SEP-2007 05:36	chk	0.0021			
20-SEP-2007 05:03	chk	0.0020			
21-SEP-2007 05:07	chk	0.0019	In		
22-SEP-2007 08:47	chk	0.0020			
24-SEP-2007 05:05	chk	0.0020			

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 2990.000000 Upper Bound : 3190.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk	3090.2769						
3-SEP-2007 07:05	chk	3090.8455						
4-SEP-2007 05:31	chk	3090.2585						
5-SEP-2007 05:36	chk	3090.5674						
6-SEP-2007 06:17	chk	3090.4038						
7-SEP-2007 06:17	chk	3090.5879						
8-SEP-2007 08:04	chk	3090.6973						
10-SEP-2007 05:17	chk	3090.6421						
11-SEP-2007 04:56	chk	3090.5825						
12-SEP-2007 05:12	chk	3090.7871						
13-SEP-2007 05:08	chk	3090.3101						
14-SEP-2007 04:49	chk	3090.6382						
15-SEP-2007 07:57	chk	3090.5894						
17-SEP-2007 05:06	chk	3090.6316						
18-SEP-2007 04:40	chk	3090.5720						
19-SEP-2007 05:36	chk	3090.7107						
20-SEP-2007 05:03	chk	3090.6885						
21-SEP-2007 05:07	chk	3090.5977						
22-SEP-2007 08:47	chk	3090.5806						

24-SEP-2007 05:05 chk 3090.9207 | | |

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
 Mean : 1.741374 Std Deviation : 0.087094

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		1.7155					
3-SEP-2007 07:05	chk		1.7080					
4-SEP-2007 05:31	chk		1.8490					
5-SEP-2007 05:36	chk		1.8843					
6-SEP-2007 06:17	chk		1.8844					
7-SEP-2007 06:17	chk		1.8365					
8-SEP-2007 08:04	chk		1.8485					
10-SEP-2007 05:17	chk		1.7195					
11-SEP-2007 04:56	chk		1.7989					
12-SEP-2007 05:12	chk		1.8556					
13-SEP-2007 05:08	chk		1.7618					
14-SEP-2007 04:49	chk		1.7915					
15-SEP-2007 07:57	chk		1.7584					
17-SEP-2007 05:06	chk		1.8215					
18-SEP-2007 04:40	chk		1.8599					
19-SEP-2007 05:36	chk ✓		1.7302					
20-SEP-2007 05:03	chk		1.6084					
21-SEP-2007 05:07	chk		1.7601					
22-SEP-2007 08:47	chk		1.7925					
24-SEP-2007 05:05	chk		1.8995					

Quality Assurance Report. Generated 25-SEP-2007 13:49:22.95

QA Filename : \$DISK1:[GER10.QA]BKG.QAF;4

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 0.000000 Std Deviation : 0.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0000		
9-SEP-2007 06:53	bkg		0.0000		
16-SEP-2007 07:29	bkg		0.0000		
23-SEP-2007 07:57	bkg		0.0000		

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 9.645209 Std Deviation : 2.430990

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		11.7428		
9-SEP-2007 06:53	bkg		11.8236		
16-SEP-2007 07:29	bkg		12.1162		
23-SEP-2007 07:57	bkg		11.9388		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 18.328323 Std Deviation : 4.716222

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		22.3985		
9-SEP-2007 06:53	bkg		21.6457		

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
16-SEP-2007 07:29	bkg		23.2979		
23-SEP-2007 07:57	bkg		23.0221		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 18.297325 Std Deviation : 4.720364

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		22.9662		
9-SEP-2007 06:53	bkg		24.1458		
16-SEP-2007 07:29	bkg		22.0930		
23-SEP-2007 07:57	bkg		23.2423		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 14.296664 Std Deviation : 3.669813

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		17.5616		
9-SEP-2007 06:53	bkg		17.5682		
16-SEP-2007 07:29	bkg		18.1158		
23-SEP-2007 07:57	bkg		17.9652		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 16.289078 Std Deviation : 4.193914

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		20.3617		
9-SEP-2007 06:53	bkg		19.7192		
16-SEP-2007 07:29	bkg		20.4319		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
23-SEP-2007 07:57	bkg		19.9694		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 14.048932 Std Deviation : 3.637539

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		17.3169					
9-SEP-2007 06:53	bkg		17.1326					
16-SEP-2007 07:29	bkg		17.9541					
23-SEP-2007 07:57	bkg		17.7331					

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 8.292564 Std Deviation : 2.162731

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		10.0701					
9-SEP-2007 06:53	bkg		10.2386					
16-SEP-2007 07:29	bkg		10.0588					
23-SEP-2007 07:57	bkg		9.8774					

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 17.908802 Std Deviation : 4.258226

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		23.0100					
9-SEP-2007 06:53	bkg		22.3895					

16-SEP-2007 07:29 bkg 21.7672 | | |
 23-SEP-2007 07:57 bkg 22.0164 | | |

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----
 Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 16.695755 Std Deviation : 4.287898

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg			21.1573		
9-SEP-2007 06:53 bkg			19.8661		
16-SEP-2007 07:29 bkg			20.5101		
23-SEP-2007 07:57 bkg			20.1640		

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----
 Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 5.493475 Std Deviation : 1.424055

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg			6.6078		
9-SEP-2007 06:53 bkg			6.8439		
16-SEP-2007 07:29 bkg			6.7517		
23-SEP-2007 07:57 bkg			6.9713		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 79.690552 Std Deviation : 20.539301

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		98.4701					
9-SEP-2007 06:53	bkg		96.5950					
16-SEP-2007 07:29	bkg		102.0701					
23-SEP-2007 07:57	bkg		98.3516					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:36.25

QA Filename : \$DISK1:[GER11.QA]CHECK.QAF;2

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.006900 Upper Bound : 0.007270

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.007099 Std Deviation : 0.000062

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		0.0071					
3-SEP-2007 07:06	chk		0.0071					
4-SEP-2007 05:16	chk		0.0072					
5-SEP-2007 05:17	chk		0.0071					
6-SEP-2007 06:17	chk		0.0070					
7-SEP-2007 06:17	chk		0.0072					
10-SEP-2007 04:59	chk		0.0070					
11-SEP-2007 04:41	chk		0.0070					
11-SEP-2007 04:56	chk		0.0072					
12-SEP-2007 04:56	chk		0.0071					
13-SEP-2007 04:49	chk		0.0072	In				
14-SEP-2007 05:45	chk		0.0071					
15-SEP-2007 07:57	chk		0.0072					
15-SEP-2007 08:17	chk		0.0071					
17-SEP-2007 04:48	chk		0.0071					
18-SEP-2007 04:40	chk		0.0070					
19-SEP-2007 05:26	chk ✓		0.0070					
20-SEP-2007 04:53	chk		0.0070					
21-SEP-2007 04:52	chk		0.0070	In				
22-SEP-2007 08:47	chk		0.0071					
24-SEP-2007 04:49	chk		0.0072	In				

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 430.000000 Upper Bound : 630.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		530.0656		
3-SEP-2007 07:06	chk		530.0187		
4-SEP-2007 05:16	chk		530.0007		
5-SEP-2007 05:17	chk		530.0092		
6-SEP-2007 06:17	chk		529.9516		
7-SEP-2007 06:17	chk		529.9592		

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
10-SEP-2007 04:59	chk		539.7204		
11-SEP-2007 04:41	chk		537.7434		
11-SEP-2007 04:56	chk		537.7303		
12-SEP-2007 04:56	chk		537.3962		
13-SEP-2007 04:49	chk		537.3322		
14-SEP-2007 05:45	chk		537.5441		
15-SEP-2007 07:57	chk		537.4274		
15-SEP-2007 08:17	chk		537.3803		
17-SEP-2007 04:48	chk		537.3549		
18-SEP-2007 04:40	chk		537.4213		
19-SEP-2007 05:26	chk ✓		537.3439		
20-SEP-2007 04:53	chk		537.2328		
21-SEP-2007 04:52	chk		537.2675		
22-SEP-2007 08:47	chk		537.2721		
24-SEP-2007 04:49	chk		537.0826		

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.686990 Std Deviation : 0.008978

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:45	chk		0.7092	In
3-SEP-2007 07:06	chk		0.7042	
4-SEP-2007 05:16	chk		0.6985	
5-SEP-2007 05:17	chk		0.6988	
6-SEP-2007 06:17	chk		0.6997	
7-SEP-2007 06:17	chk		0.6855	
10-SEP-2007 04:59	chk		0.6982	
11-SEP-2007 04:41	chk		0.7066	In
11-SEP-2007 04:56	chk		0.6985	
12-SEP-2007 04:56	chk		0.6869	
13-SEP-2007 04:49	chk		0.6927	
14-SEP-2007 05:45	chk		0.6707	
15-SEP-2007 07:57	chk		0.7162	Ac
15-SEP-2007 08:17	chk		0.7005	
17-SEP-2007 04:48	chk		0.6996	
18-SEP-2007 04:40	chk		0.7012	
19-SEP-2007 05:26	chk ✓		0.7074	In
20-SEP-2007 04:53	chk		0.6981	
21-SEP-2007 04:52	chk		0.6881	
22-SEP-2007 08:47	chk		0.7000	
24-SEP-2007 04:49	chk		0.7007	

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001420 Upper Bound : 0.158000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.001425 Std Deviation : 0.000331

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued)

Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk		0.0015		
3-SEP-2007 07:06	chk		0.0015		
4-SEP-2007 05:16	chk		0.0015		
5-SEP-2007 05:17	chk		0.0015		
6-SEP-2007 06:17	chk		0.0014		
7-SEP-2007 06:17	chk		0.0015		
10-SEP-2007 04:59	chk		0.0015		
11-SEP-2007 04:41	chk	No Value			
11-SEP-2007 04:56	chk		0.0015		
12-SEP-2007 04:56	chk		0.0015		
13-SEP-2007 04:49	chk		0.0015		
14-SEP-2007 05:45	chk		0.0015		
15-SEP-2007 07:57	chk		0.0015		
15-SEP-2007 08:17	chk		0.0015		
17-SEP-2007 04:48	chk		0.0015		
18-SEP-2007 04:40	chk		0.0015		
19-SEP-2007 05:26	chk		0.0015		
20-SEP-2007 04:53	chk		0.0015		
21-SEP-2007 04:52	chk		0.0015		
22-SEP-2007 08:47	chk		0.0015		
24-SEP-2007 04:49	chk		0.0015		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5976.000000 Upper Bound : 6176.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk		6072.9678		
3-SEP-2007 07:06	chk		6073.1724		
4-SEP-2007 05:16	chk		6072.9829		
5-SEP-2007 05:17	chk		6072.9180		
6-SEP-2007 06:17	chk		6072.8696		

7-SEP-2007 06:17	chk	6073.0488	
10-SEP-2007 04:59	chk	6185.8838	Ab
11-SEP-2007 04:41	chk	No Value	
11-SEP-2007 04:56	chk	6163.4673	
12-SEP-2007 04:56	chk	6159.5747	
13-SEP-2007 04:49	chk	6158.3560	
14-SEP-2007 05:45	chk	6160.4209	
15-SEP-2007 07:57	chk	6158.5317	
15-SEP-2007 08:17	chk	6158.5996	
17-SEP-2007 04:48	chk	6157.8960	
18-SEP-2007 04:40	chk	6158.7578	
19-SEP-2007 05:26	chk ✓	6158.2700	
20-SEP-2007 04:53	chk	6157.1104	
21-SEP-2007 04:52	chk	6157.2603	
22-SEP-2007 08:47	chk	6156.8389	
24-SEP-2007 04:49	chk	6155.5161	

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 1.798652 Std Deviation : 0.064431

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk	1.7163	
3-SEP-2007 07:06	chk	1.8542	
4-SEP-2007 05:16	chk	1.8625	
5-SEP-2007 05:17	chk	1.9018	
6-SEP-2007 06:17	chk	1.9809	In
7-SEP-2007 06:17	chk	1.8288	
10-SEP-2007 04:59	chk	1.8533	
11-SEP-2007 04:41	chk	No Value	
11-SEP-2007 04:56	chk	1.7422	

12-SEP-2007 04:56	chk	1.8286			
13-SEP-2007 04:49	chk	1.9597		In	
14-SEP-2007 05:45	chk	1.7381			
15-SEP-2007 07:57	chk	1.8152			
15-SEP-2007 08:17	chk	1.8037			
17-SEP-2007 04:48	chk	1.6945			
18-SEP-2007 04:40	chk	1.8299			
19-SEP-2007 05:26	chk ✓	1.7718			
20-SEP-2007 04:53	chk	1.8037			
21-SEP-2007 04:52	chk	1.7138			
22-SEP-2007 08:47	chk	1.7479			
24-SEP-2007 04:49	chk	1.8919			

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.002200 Upper Bound : 0.002530

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.002352 Std Deviation : 0.000310

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk	0.0023						
3-SEP-2007 07:06	chk	0.0024						
4-SEP-2007 05:16	chk	0.0024						
5-SEP-2007 05:17	chk	0.0024						
6-SEP-2007 06:17	chk	0.0024						
7-SEP-2007 06:17	chk	0.0023						
10-SEP-2007 04:59	chk	0.0025						
11-SEP-2007 04:41	chk	No Value						
11-SEP-2007 04:56	chk	0.0024						
12-SEP-2007 04:56	chk	0.0023						
13-SEP-2007 04:49	chk	0.0024						
14-SEP-2007 05:45	chk	0.0024						
15-SEP-2007 07:57	chk	0.0024						
15-SEP-2007 08:17	chk	0.0023						

17-SEP-2007 04:48 chk 0.0024 | | |
 18-SEP-2007 04:40 chk 0.0024 | | |
 19-SEP-2007 05:26 chk ✓ 0.0023 | | |

Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
20-SEP-2007 04:53	chk		0.0025					
21-SEP-2007 04:52	chk		0.0025					
22-SEP-2007 08:47	chk		0.0025					
24-SEP-2007 04:49	chk		0.0024					

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3265.000000 Upper Bound : 3465.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		3362.9958					
3-SEP-2007 07:06	chk		3362.8784					
4-SEP-2007 05:16	chk		3362.8328					
5-SEP-2007 05:17	chk		3362.8232					
6-SEP-2007 06:17	chk		3362.5791					
7-SEP-2007 06:17	chk		3362.8130					
10-SEP-2007 04:59	chk		3425.2480					
11-SEP-2007 04:41	chk		No Value					
11-SEP-2007 04:56	chk		3412.8677					
12-SEP-2007 04:56	chk		3410.6448					
13-SEP-2007 04:49	chk		3409.9849					
14-SEP-2007 05:45	chk		3411.2041					
15-SEP-2007 07:57	chk		3410.2275					
15-SEP-2007 08:17	chk		3410.1226					
17-SEP-2007 04:48	chk		3409.8225					
18-SEP-2007 04:40	chk		3410.3049					
19-SEP-2007 05:26	chk ✓		3409.9844					
20-SEP-2007 04:53	chk		3409.4241					
21-SEP-2007 04:52	chk		3409.6072					
22-SEP-2007 08:47	chk		3409.1501					
24-SEP-2007 04:49	chk		3408.4839					

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 1.309449 Std Deviation : 0.051004

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		1.3198		
3-SEP-2007 07:06	chk		1.2700		
4-SEP-2007 05:16	chk		1.3568		
5-SEP-2007 05:17	chk		1.3099		
6-SEP-2007 06:17	chk		1.3864		

Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
7-SEP-2007 06:17	chk		1.2530		
10-SEP-2007 04:59	chk		1.3456		
11-SEP-2007 04:41	chk	No Value			
11-SEP-2007 04:56	chk		1.2912		
12-SEP-2007 04:56	chk		1.2864		
13-SEP-2007 04:49	chk		1.2978		
14-SEP-2007 05:45	chk		1.4487	In	
15-SEP-2007 07:57	chk		1.2324		
15-SEP-2007 08:17	chk		1.2833		
17-SEP-2007 04:48	chk		1.3250		
18-SEP-2007 04:40	chk		1.3571		
19-SEP-2007 05:26	chk ✓		1.2714		
20-SEP-2007 04:53	chk		1.3239		
21-SEP-2007 04:52	chk		1.2785		
22-SEP-2007 08:47	chk		1.4135	In	
24-SEP-2007 04:49	chk		1.3199		

Quality Assurance Report. Generated 25-SEP-2007 13:49:37.87

QA Filename : \$DISK1:[GER11.QA]BKG.QAF;2

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.091627 Std Deviation : 0.025421

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.1039		
9-SEP-2007 06:53	bkg		0.0429		
16-SEP-2007 07:29	bkg		0.1062		
23-SEP-2007 07:57	bkg		0.1018		

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.079423 Std Deviation : 0.002079

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0804		
9-SEP-2007 06:53	bkg		0.0766		
16-SEP-2007 07:29	bkg		0.0777		
23-SEP-2007 07:57	bkg		0.0783		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.044311 Std Deviation : 0.002411

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	bkg		0.0462		
9-SEP-2007 06:53	bkg		0.0435		

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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16-SEP-2007 07:29	bkg		0.0420		
23-SEP-2007 07:57	bkg		0.0440		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.051430 Std Deviation : 0.002244

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	bkg		0.0521		
9-SEP-2007 06:53	bkg		0.0464	In	
16-SEP-2007 07:29	bkg		0.0504		
23-SEP-2007 07:57	bkg		0.0496		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.064752 Std Deviation : 0.002729

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0652		
9-SEP-2007 06:53	bkg		0.0716	In	
16-SEP-2007 07:29	bkg		0.0663		
23-SEP-2007 07:57	bkg		0.0681		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.072136 Std Deviation : 0.003801

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0742		
9-SEP-2007 06:53	bkg		0.0684		
16-SEP-2007 07:29	bkg		0.0740		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
23-SEP-2007 07:57	bkg		0.0706		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.068083 Std Deviation : 0.004526

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0698					
9-SEP-2007 06:53	bkg		0.0591					
16-SEP-2007 07:29	bkg		0.0729					
23-SEP-2007 07:57	bkg		0.0748					

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.086340 Std Deviation : 0.002392

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0849					
9-SEP-2007 06:53	bkg		0.0792	In				
16-SEP-2007 07:29	bkg		0.0841					
23-SEP-2007 07:57	bkg		0.0870					

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.083144 Std Deviation : 0.012332

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0849					
9-SEP-2007 06:53	bkg		0.0740					

16-SEP-2007 07:29 bkg 0.0807 | | |
 23-SEP-2007 07:57 bkg 0.0872 | | |

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.057979 Std Deviation : 0.002732

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg			0.0623		
9-SEP-2007 06:53 bkg			0.0564		
16-SEP-2007 07:29 bkg			0.0576		
23-SEP-2007 07:57 bkg			0.0618		

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.081970 Std Deviation : 0.002214

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg			0.0813		
9-SEP-2007 06:53 bkg			0.0805		
16-SEP-2007 07:29 bkg			0.0820		
23-SEP-2007 07:57 bkg			0.0829		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
Parameter Units : CPM Parameter Type : Nuclide
Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
Mean : 0.635112 Std Deviation : 0.014068

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.6234					
9-SEP-2007 06:53	bkg		0.6432					
16-SEP-2007 07:29	bkg		0.6339					
23-SEP-2007 07:57	bkg		0.6198					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:44.54

QA Filename : \$DISK1:[GER12.QA]CHECK.QAF;2

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.008700 Upper Bound : 0.009110

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.008920 Std Deviation : 0.000063

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:46	CHK		0.0089					
3-SEP-2007 07:06	CHK		0.0089					
4-SEP-2007 05:16	CHK		0.0090					
5-SEP-2007 05:18	CHK		0.0089					
6-SEP-2007 06:17	CHK		0.0089					
7-SEP-2007 06:17	CHK		0.0089					
8-SEP-2007 08:04	CHK		0.0088					
10-SEP-2007 04:59	CHK		0.0090					
11-SEP-2007 04:41	CHK		0.0089					
12-SEP-2007 04:56	CHK		0.0089					
13-SEP-2007 04:49	CHK		0.0089					
14-SEP-2007 04:49	CHK		0.0088					
15-SEP-2007 07:57	CHK		0.0090					
17-SEP-2007 04:48	CHK		0.0089					
18-SEP-2007 04:40	CHK		0.0089					
19-SEP-2007 05:21	CHK		0.0089					
20-SEP-2007 04:53	CHK		0.0089					
21-SEP-2007 04:52	CHK		0.0091	In				
22-SEP-2007 08:47	CHK		0.0089					
24-SEP-2007 04:49	CHK		0.0089					

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 345.000000 Upper Bound : 545.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	CHK		445.6812		
3-SEP-2007 07:06	CHK		445.7051		
4-SEP-2007 05:16	CHK		445.7049		
5-SEP-2007 05:18	CHK		445.6875		
6-SEP-2007 06:17	CHK		445.6837		
7-SEP-2007 06:17	CHK		445.6706		
8-SEP-2007 08:04	CHK		445.6112		

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
10-SEP-2007 04:59	CHK		445.6514		
11-SEP-2007 04:41	CHK		445.5421		
12-SEP-2007 04:56	CHK		445.6054		
13-SEP-2007 04:49	CHK		445.6005		
14-SEP-2007 04:49	CHK		445.7271		
15-SEP-2007 07:57	CHK		445.7359		
17-SEP-2007 04:48	CHK		445.6801		
18-SEP-2007 04:40	CHK		445.6884		
19-SEP-2007 05:21	CHK ✓		445.6209		
20-SEP-2007 04:53	CHK		445.6172		
21-SEP-2007 04:52	CHK		445.6022		
22-SEP-2007 08:47	CHK		445.6105		
24-SEP-2007 04:49	CHK		445.5946		

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.840873 Std Deviation : 0.011472

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	CHK		0.8255		
3-SEP-2007 07:06	CHK		0.8371		
4-SEP-2007 05:16	CHK		0.8423		
5-SEP-2007 05:18	CHK		0.8440		
6-SEP-2007 06:17	CHK		0.8252		
7-SEP-2007 06:17	CHK		0.8523		
8-SEP-2007 08:04	CHK		0.8375		
10-SEP-2007 04:59	CHK		0.8424		
11-SEP-2007 04:41	CHK		0.8397		
12-SEP-2007 04:56	CHK		0.8587		
13-SEP-2007 04:49	CHK		0.8643	In	
14-SEP-2007 04:49	CHK		0.8364		
15-SEP-2007 07:57	CHK		0.8415		
17-SEP-2007 04:48	CHK		0.8426		
18-SEP-2007 04:40	CHK		0.8412		
19-SEP-2007 05:21	CHK ✓		0.8508		
20-SEP-2007 04:53	CHK		0.8257		
21-SEP-2007 04:52	CHK		0.8458		
22-SEP-2007 08:47	CHK		0.8441		
24-SEP-2007 04:49	CHK		0.8458		

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001525 Upper Bound : 0.001774

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.001650 Std Deviation : 0.000041

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:46	CHK		0.0016					
3-SEP-2007 07:06	CHK		0.0016					
4-SEP-2007 05:16	CHK		0.0017					
5-SEP-2007 05:18	CHK		0.0016					
6-SEP-2007 06:17	CHK		0.0017					
7-SEP-2007 06:17	CHK		0.0017					
8-SEP-2007 08:04	CHK		0.0016					
10-SEP-2007 04:59	CHK		0.0016					
11-SEP-2007 04:41	CHK		0.0017					
12-SEP-2007 04:56	CHK		0.0017					
13-SEP-2007 04:49	CHK		0.0016					
14-SEP-2007 04:49	CHK		0.0017					
15-SEP-2007 07:57	CHK		0.0017					
17-SEP-2007 04:48	CHK		0.0017					
18-SEP-2007 04:40	CHK		0.0017					
19-SEP-2007 05:21	CHK ✓		0.0017					
20-SEP-2007 04:53	CHK		0.0016					
21-SEP-2007 04:52	CHK		0.0017					
22-SEP-2007 08:47	CHK		0.0017					
24-SEP-2007 04:49	CHK		0.0017					

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5540.000000 Upper Bound : 5740.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:46	CHK		5640.0024					
3-SEP-2007 07:06	CHK		5639.8208					
4-SEP-2007 05:16	CHK		5639.8530					
5-SEP-2007 05:18	CHK		5640.0171					
6-SEP-2007 06:17	CHK		5639.8398					
7-SEP-2007 06:17	CHK		5640.1948					
8-SEP-2007 08:04	CHK		5639.9243					
10-SEP-2007 04:59	CHK		5639.9448					
11-SEP-2007 04:41	CHK		5639.5752					

12-SEP-2007 04:56	CHK	5639.9458			
13-SEP-2007 04:49	CHK	5639.7134			
14-SEP-2007 04:49	CHK	5640.2910			
15-SEP-2007 07:57	CHK	5640.2520			
17-SEP-2007 04:48	CHK	5640.2114			
18-SEP-2007 04:40	CHK	5640.0591			
19-SEP-2007 05:21	CHK ✓	5639.9263			
20-SEP-2007 04:53	CHK	5640.1704			
21-SEP-2007 04:52	CHK	5639.9395			
22-SEP-2007 08:47	CHK	5639.8774			
24-SEP-2007 04:49	CHK	5640.0562			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.788466 Std Deviation : 0.076747

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:46	CHK	1.8358			
3-SEP-2007 07:06	CHK	1.8215			
4-SEP-2007 05:16	CHK	1.8218			
5-SEP-2007 05:18	CHK	1.6510			
6-SEP-2007 06:17	CHK	1.8946			
7-SEP-2007 06:17	CHK	1.7636			
8-SEP-2007 08:04	CHK	1.8081			
10-SEP-2007 04:59	CHK	1.8235			
11-SEP-2007 04:41	CHK	1.7473			
12-SEP-2007 04:56	CHK	1.6914			
13-SEP-2007 04:49	CHK	1.8268			
14-SEP-2007 04:49	CHK	1.9808	In		
15-SEP-2007 07:57	CHK	1.8746			
17-SEP-2007 04:48	CHK	1.9172			

18-SEP-2007 04:40	CHK	1.8847			
19-SEP-2007 05:21	CHK ✓	1.7799			
20-SEP-2007 04:53	CHK	1.8207			
21-SEP-2007 04:52	CHK	1.7670			
22-SEP-2007 08:47	CHK	1.7716			
24-SEP-2007 04:49	CHK	1.8431			

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.002470 Upper Bound : 0.002879

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.002675 Std Deviation : 0.000068

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej

1-SEP-2007 08:46	CHK		0.0027					
3-SEP-2007 07:06	CHK		0.0027					
4-SEP-2007 05:16	CHK		0.0027					
5-SEP-2007 05:18	CHK		0.0028					
6-SEP-2007 06:17	CHK		0.0026					
7-SEP-2007 06:17	CHK		0.0027					
8-SEP-2007 08:04	CHK		0.0026					
10-SEP-2007 04:59	CHK		0.0027					
11-SEP-2007 04:41	CHK		0.0026					
12-SEP-2007 04:56	CHK		0.0027					
13-SEP-2007 04:49	CHK		0.0027					
14-SEP-2007 04:49	CHK		0.0026					
15-SEP-2007 07:57	CHK		0.0026					
17-SEP-2007 04:48	CHK		0.0027					
18-SEP-2007 04:40	CHK		0.0027					
19-SEP-2007 05:21	CHK ✓		0.0027					
20-SEP-2007 04:53	CHK		0.0028					
21-SEP-2007 04:52	CHK		0.0028					

Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
22-SEP-2007 08:47	CHK		0.0025		
24-SEP-2007 04:49	CHK		0.0027		

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3024.000000 Upper Bound : 3224.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	CHK		3099.5125		
3-SEP-2007 07:06	CHK		3099.4753		
4-SEP-2007 05:16	CHK		3099.5999		
5-SEP-2007 05:18	CHK		3099.3108		
6-SEP-2007 06:17	CHK		3099.5610		
7-SEP-2007 06:17	CHK		3099.8567		
8-SEP-2007 08:04	CHK		3099.5293		
10-SEP-2007 04:59	CHK		3099.6338		
11-SEP-2007 04:41	CHK		3099.4692		
12-SEP-2007 04:56	CHK		3099.5056		
13-SEP-2007 04:49	CHK		3099.3728		
14-SEP-2007 04:49	CHK		3099.5190		
15-SEP-2007 07:57	CHK		3099.7075		
17-SEP-2007 04:48	CHK		3099.7949		
18-SEP-2007 04:40	CHK		3099.6006		
19-SEP-2007 05:21	CHK ✓		3099.3545		
20-SEP-2007 04:53	CHK		3099.3787		
21-SEP-2007 04:52	CHK		3099.6333		
22-SEP-2007 08:47	CHK		3099.5330		
24-SEP-2007 04:49	CHK		3099.6252		

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.403218 Std Deviation : 0.054087

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:46	CHK		1.5060		
3-SEP-2007 07:06	CHK		1.5112		
4-SEP-2007 05:16	CHK		1.5148	In	
5-SEP-2007 05:18	CHK		1.3840		
6-SEP-2007 06:17	CHK		1.4779		
7-SEP-2007 06:17	CHK		1.3638		
8-SEP-2007 08:04	CHK		1.2537	In	
10-SEP-2007 04:59	CHK		1.3779		

Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
11-SEP-2007 04:41	CHK		1.3637		
12-SEP-2007 04:56	CHK		1.3550		
13-SEP-2007 04:49	CHK		1.4381		
14-SEP-2007 04:49	CHK		1.3703		
15-SEP-2007 07:57	CHK		1.3706		
17-SEP-2007 04:48	CHK		1.3791		
18-SEP-2007 04:40	CHK		1.3365		
19-SEP-2007 05:21	CHK ✓		1.4909		
20-SEP-2007 04:53	CHK		1.3923		
21-SEP-2007 04:52	CHK		1.4541		
22-SEP-2007 08:47	CHK		1.5407	In	
24-SEP-2007 04:49	CHK		1.2844	In	

Quality Assurance Report. Generated 25-SEP-2007 13:49:46.23

QA Filename : \$DISK1:[GER12.QA]BKG.QAF;2

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.000000 Std Deviation : 0.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		0.0000	
3-SEP-2007 07:38	bkg		0.0000	
9-SEP-2007 06:53	bkg		0.0000	
16-SEP-2007 07:29	bkg		0.0000	
23-SEP-2007 07:57	bkg		0.0000	

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 15.322645 Std Deviation : 0.474621

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		14.8595	
3-SEP-2007 07:38	bkg		15.0686	
9-SEP-2007 06:53	bkg		15.5433	
16-SEP-2007 07:29	bkg		15.6945	
23-SEP-2007 07:57	bkg		15.1325	

-- Multi-Test Full Report --

Description : MDA Co-60 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 25.648373 Std Deviation : 1.098100

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	bkg		25.8213		
3-SEP-2007 07:38	bkg		23.3998	In	
9-SEP-2007 06:53	bkg		26.4243		
16-SEP-2007 07:29	bkg		23.9394		
23-SEP-2007 07:57	bkg		25.4328		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 25.329380 Std Deviation : 1.028338

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27	bkg		25.2678		
3-SEP-2007 07:38	bkg		24.0239		
9-SEP-2007 06:53	bkg		22.4812	In	
16-SEP-2007 07:29	bkg		26.0672		
23-SEP-2007 07:57	bkg		24.2762		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 20.596582 Std Deviation : 0.771929

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		21.7460		
3-SEP-2007 07:38	bkg		21.0714		
9-SEP-2007 06:53	bkg		20.4353		
16-SEP-2007 07:29	bkg		22.0902		
23-SEP-2007 07:57	bkg		20.0164		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 22.668747 Std Deviation : 0.920323

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
Quality Assurance Multi-Test Full Report (continued)					Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		23.5091		
3-SEP-2007 07:38	bkg		24.4191		
9-SEP-2007 06:53	bkg		22.8416		
16-SEP-2007 07:29	bkg		23.8559		
23-SEP-2007 07:57	bkg		23.8699		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 20.695162 Std Deviation : 0.570306

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		22.6273	Ac
3-SEP-2007 07:38	bkg		20.9747	
9-SEP-2007 06:53	bkg		21.5219	
16-SEP-2007 07:29	bkg		21.9181	In
23-SEP-2007 07:57	bkg		21.4389	

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 13.822400 Std Deviation : 0.446293

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		13.8328	
3-SEP-2007 07:38	bkg		13.5977	
9-SEP-2007 06:53	bkg		13.8292	
16-SEP-2007 07:29	bkg		13.3223	
23-SEP-2007 07:57	bkg		14.0967	

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 25.858147 Std Deviation : 2.382447

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
Quality Assurance Multi-Test Full Report (continued)				Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
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2-SEP-2007 07:27	bkg	27.6238			
3-SEP-2007 07:38	bkg	26.8509			
9-SEP-2007 06:53	bkg	26.4018			
16-SEP-2007 07:29	bkg	26.9878			
23-SEP-2007 07:57	bkg	27.2487			

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 25.462946 Std Deviation : 1.447129

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		27.0428					
3-SEP-2007 07:38	bkg		26.3212					
9-SEP-2007 06:53	bkg		23.2006					
16-SEP-2007 07:29	bkg		26.1767					
23-SEP-2007 07:57	bkg		26.4204					

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 10.611926 Std Deviation : 0.363258

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		10.7601					
3-SEP-2007 07:38	bkg		10.4672					
9-SEP-2007 06:53	bkg		10.3103					
16-SEP-2007 07:29	bkg		10.5009					

23-SEP-2007 07:57 bkg 10.4786 | | |

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 125.925743 Std Deviation : 3.582425

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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2-SEP-2007 07:27	bkg		128.3416					
3-SEP-2007 07:38	bkg		130.3334					
9-SEP-2007 06:53	bkg		126.4133					
16-SEP-2007 07:29	bkg		124.5615					
23-SEP-2007 07:57	bkg		122.3130					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:57.47

QA Filename : \$DISK1:GER14.QA\CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.006158 Std Deviation : 0.000062

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:46	chk		0.0061					
3-SEP-2007 07:06	chk		0.0061					
4-SEP-2007 05:16	chk		0.0062					
5-SEP-2007 05:18	chk		0.0062					
6-SEP-2007 06:17	chk		0.0062					
7-SEP-2007 06:17	chk		0.0060					
8-SEP-2007 08:04	chk		0.0061					
10-SEP-2007 04:59	chk		0.0062					
11-SEP-2007 04:41	chk		0.0062					
12-SEP-2007 04:56	chk		0.0062					
13-SEP-2007 04:49	chk		0.0062					
14-SEP-2007 04:49	chk		0.0061					
15-SEP-2007 07:57	chk		0.0061					
17-SEP-2007 04:48	chk		0.0062					
18-SEP-2007 04:40	chk		0.0061					
19-SEP-2007 05:21	chk ✓		0.0062					
20-SEP-2007 04:53	chk		0.0061					
21-SEP-2007 04:52	chk		0.0062					
22-SEP-2007 08:47	chk		0.0062					
24-SEP-2007 04:49	chk		0.0060	In				

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid

Parameter Units : channel Parameter Type : Peak

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	chk		493.3646	
3-SEP-2007 07:06	chk		493.3355	
4-SEP-2007 05:16	chk		493.3839	
5-SEP-2007 05:18	chk		493.3871	
6-SEP-2007 06:17	chk		493.3247	
7-SEP-2007 06:17	chk		493.3751	
8-SEP-2007 08:04	chk		493.2817	
10-SEP-2007 04:59	chk		493.3173	
11-SEP-2007 04:41	chk		493.2944	
12-SEP-2007 04:56	chk		493.2717	
13-SEP-2007 04:49	chk		493.3170	
14-SEP-2007 04:49	chk		493.3575	
15-SEP-2007 07:57	chk		493.2530	

Quality Assurance Multi-Test Full Report (continued)

Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
17-SEP-2007 04:48	chk		493.3113	
18-SEP-2007 04:40	chk		493.2593	
19-SEP-2007 05:21	chk ✓		493.2616	
20-SEP-2007 04:53	chk		493.2549	
21-SEP-2007 04:52	chk		493.2574	
22-SEP-2007 08:47	chk		493.2678	
24-SEP-2007 04:49	chk		493.2123	

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution

Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 1.442194 Std Deviation : 0.060090

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	chk		1.4249	

3-SEP-2007 07:06	chk	1.4550		
4-SEP-2007 05:16	chk	1.4397		
5-SEP-2007 05:18	chk	1.4451		
6-SEP-2007 06:17	chk	1.4369		
7-SEP-2007 06:17	chk	1.4226		
8-SEP-2007 08:04	chk	1.4118		
10-SEP-2007 04:59	chk	1.4604		
11-SEP-2007 04:41	chk	1.4203		
12-SEP-2007 04:56	chk	1.4079		
13-SEP-2007 04:49	chk	1.4364		
14-SEP-2007 04:49	chk	1.4044		
15-SEP-2007 07:57	chk	1.4359		
17-SEP-2007 04:48	chk	1.3892		
18-SEP-2007 04:40	chk	1.4728		
19-SEP-2007 05:21	chk ✓	1.4381		
20-SEP-2007 04:53	chk	1.4427		
21-SEP-2007 04:52	chk	1.4660		
22-SEP-2007 08:47	chk	1.4533		
24-SEP-2007 04:49	chk	1.4463		

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.001010 Std Deviation : 0.000021

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:46	chk	0.0010		
3-SEP-2007 07:06	chk	0.0010		
4-SEP-2007 05:16	chk	0.0010		
5-SEP-2007 05:18	chk	0.0010		
6-SEP-2007 06:17	chk	0.0010		
7-SEP-2007 06:17	chk	0.0010		

8-SEP-2007 08:04	chk	0.0010	In
10-SEP-2007 04:59	chk	0.0010	
11-SEP-2007 04:41	chk	0.0010	
12-SEP-2007 04:56	chk	0.0010	
13-SEP-2007 04:49	chk	0.0010	
14-SEP-2007 04:49	chk	0.0010	
15-SEP-2007 07:57	chk	0.0010	
17-SEP-2007 04:48	chk	0.0010	
18-SEP-2007 04:40	chk	0.0010	
19-SEP-2007 05:21	chk ✓	0.0010	In
20-SEP-2007 04:53	chk	0.0010	
21-SEP-2007 04:52	chk	0.0010	
22-SEP-2007 08:47	chk	0.0010	
24-SEP-2007 04:49	chk	0.0010	

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:46	chk	5673.8062						
3-SEP-2007 07:06	chk	5673.8213						
4-SEP-2007 05:16	chk	5673.4624						
5-SEP-2007 05:18	chk	5673.9780						
6-SEP-2007 06:17	chk	5673.6724						
7-SEP-2007 06:17	chk	5673.8604						
8-SEP-2007 08:04	chk	5674.1865						
10-SEP-2007 04:59	chk	5674.1104						
11-SEP-2007 04:41	chk	5673.8628						
12-SEP-2007 04:56	chk	5673.8032						
13-SEP-2007 04:49	chk	5674.1138						
14-SEP-2007 04:49	chk	5674.1592						
15-SEP-2007 07:57	chk	5674.0337						
17-SEP-2007 04:48	chk	5674.0938						
18-SEP-2007 04:40	chk	5674.0610						
19-SEP-2007 05:21	chk ✓	5674.3203						
20-SEP-2007 04:53	chk	5674.0923						
21-SEP-2007 04:52	chk	5674.2207						
22-SEP-2007 08:47	chk	5673.9976						
24-SEP-2007 04:49	chk	5674.1421						

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 2.117797 Std Deviation : 0.107560

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:46	chk		2.1739					
3-SEP-2007 07:06	chk		1.9833					
4-SEP-2007 05:16	chk		2.1084					
5-SEP-2007 05:18	chk		2.1083					
6-SEP-2007 06:17	chk		2.1089					
7-SEP-2007 06:17	chk		2.1080					
8-SEP-2007 08:04	chk		2.0712					
10-SEP-2007 04:59	chk		2.2426					
11-SEP-2007 04:41	chk		2.0270					
12-SEP-2007 04:56	chk		1.9762					
13-SEP-2007 04:49	chk		2.1654					
14-SEP-2007 04:49	chk		2.1165					
15-SEP-2007 07:57	chk		2.0410					
17-SEP-2007 04:48	chk		2.2943					
18-SEP-2007 04:40	chk		2.0092					
19-SEP-2007 05:21	chk ✓		2.0894					
20-SEP-2007 04:53	chk		2.1246					
21-SEP-2007 04:52	chk		2.2854					
22-SEP-2007 08:47	chk		1.9171					
24-SEP-2007 04:49	chk		2.0536					

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.001644 Std Deviation : 0.000041

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	chk		0.0016	
3-SEP-2007 07:06	chk		0.0016	
4-SEP-2007 05:16	chk		0.0016	
5-SEP-2007 05:18	chk		0.0016	
6-SEP-2007 06:17	chk		0.0016	
7-SEP-2007 06:17	chk		0.0016	
8-SEP-2007 08:04	chk		0.0016	
10-SEP-2007 04:59	chk		0.0017	
11-SEP-2007 04:41	chk		0.0016	
12-SEP-2007 04:56	chk		0.0016	
13-SEP-2007 04:49	chk		0.0017	
14-SEP-2007 04:49	chk		0.0016	
15-SEP-2007 07:57	chk		0.0016	
17-SEP-2007 04:48	chk		0.0017	
18-SEP-2007 04:40	chk		0.0016	
19-SEP-2007 05:21	chk ✓		0.0016	
20-SEP-2007 04:53	chk		0.0015	In
21-SEP-2007 04:52	chk		0.0017	
22-SEP-2007 08:47	chk		0.0016	
24-SEP-2007 04:49	chk		0.0016	

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	chk		3140.1504	
3-SEP-2007 07:06	chk		3139.9001	
4-SEP-2007 05:16	chk		3139.4302	

5-SEP-2007 05:18	chk	3140.1409		
6-SEP-2007 06:17	chk	3140.1938		
7-SEP-2007 06:17	chk	3139.9937		
8-SEP-2007 08:04	chk	3140.1318		
10-SEP-2007 04:59	chk	3140.3196		
11-SEP-2007 04:41	chk	3140.2292		
12-SEP-2007 04:56	chk	3140.2603		
13-SEP-2007 04:49	chk	3140.1611		
14-SEP-2007 04:49	chk	3140.3782		
15-SEP-2007 07:57	chk	3140.2236		
17-SEP-2007 04:48	chk	3140.2290		
18-SEP-2007 04:40	chk	3140.4204		
19-SEP-2007 05:21	chk ✓	3140.3464		
20-SEP-2007 04:53	chk	3139.9893		
21-SEP-2007 04:52	chk	3140.0955		
22-SEP-2007 08:47	chk	3140.1763		
24-SEP-2007 04:49	chk	3140.4333		

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 1.799400 Std Deviation : 0.107164

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	chk		1.8638	
3-SEP-2007 07:06	chk		1.7570	
4-SEP-2007 05:16	chk		1.7298	
5-SEP-2007 05:18	chk		1.7124	
6-SEP-2007 06:17	chk		1.7767	
7-SEP-2007 06:17	chk		1.7141	
8-SEP-2007 08:04	chk		1.6945	
10-SEP-2007 04:59	chk		1.8771	
11-SEP-2007 04:41	chk		1.7736	
12-SEP-2007 04:56	chk		1.9275	
13-SEP-2007 04:49	chk		1.7580	
14-SEP-2007 04:49	chk		1.6864	

15-SEP-2007 07:57	chk	1.6600		
17-SEP-2007 04:48	chk	1.7411		
18-SEP-2007 04:40	chk	1.8812		
19-SEP-2007 05:21	chk ✓	1.8514		
20-SEP-2007 04:53	chk	1.8867		
21-SEP-2007 04:52	chk	1.7961		
22-SEP-2007 08:47	chk	1.9248		
24-SEP-2007 04:49	chk	1.7645		

Quality Assurance Report. Generated 25-SEP-2007 13:49:58.83

QA Filename : \$DISK1:[GER14.QA]BKG.QAF;3

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.121741 Std Deviation : 0.029401

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		0.1298		
9-SEP-2007 06:54	bkg		0.1344		
16-SEP-2007 07:29	bkg		0.1322		
23-SEP-2007 07:57	bkg		0.1359		

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.116893 Std Deviation : 0.011792

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		0.1103		
9-SEP-2007 06:54	bkg		0.1118		
16-SEP-2007 07:29	bkg		0.1108		
23-SEP-2007 07:57	bkg		0.1131		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.049356 Std Deviation : 0.002607

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		0.0486		
9-SEP-2007 06:54	bkg		0.0487		

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
16-SEP-2007 07:29	bkg		0.0467		
23-SEP-2007 07:57	bkg		0.0510		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.060011 Std Deviation : 0.003166

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		0.0608		
9-SEP-2007 06:54	bkg		0.0588		
16-SEP-2007 07:29	bkg		0.0569		
23-SEP-2007 07:57	bkg		0.0607		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.081265 Std Deviation : 0.005879

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		0.0779		
9-SEP-2007 06:54	bkg		0.0779		
16-SEP-2007 07:29	bkg		0.0790		
23-SEP-2007 07:57	bkg		0.0778		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.090750 Std Deviation : 0.010128

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		0.0876		
9-SEP-2007 06:54	bkg		0.0888		
16-SEP-2007 07:29	bkg		0.0874		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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23-SEP-2007 07:57	bkg		0.0889		
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-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.076672 Std Deviation : 0.006037

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:28	bkg		0.0762		
9-SEP-2007 06:54	bkg		0.0731		
16-SEP-2007 07:29	bkg		0.0733		
23-SEP-2007 07:57	bkg		0.0762		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.137072 Std Deviation : 0.013763

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:28	bkg		0.1303		
9-SEP-2007 06:54	bkg		0.1318		
16-SEP-2007 07:29	bkg		0.1290		
23-SEP-2007 07:57	bkg		0.1342		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM

Parameter Units : uCi Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		0.1030	Ab	
9-SEP-2007 06:54	bkg		0.1024	Ab	
16-SEP-2007 07:29	bkg		0.1066	Ab	
23-SEP-2007 07:57	bkg		0.1036	Ab	

see Lab's e-mail response

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM

Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.074837 Std Deviation : 0.001926

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:28	bkg		0.0766		
9-SEP-2007 06:54	bkg		0.0786		
16-SEP-2007 07:29	bkg		0.0761		
23-SEP-2007 07:57	bkg		0.0740		

-- Multi-Test Full Report --

Description : MDA U-235 CPM

Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.135773 Std Deviation : 0.015997

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	bkg		0.1313					
9-SEP-2007 06:54	bkg		0.1314					
16-SEP-2007 07:29	bkg		0.1290					
23-SEP-2007 07:57	bkg		0.1367					

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	bkg		0.8961					
9-SEP-2007 06:54	bkg		0.8807					
16-SEP-2007 07:29	bkg		0.8937					
23-SEP-2007 07:57	bkg		0.8883					

Quality Assurance Report.

Generated 25-SEP-2007 13:50:26.54

QA Filename : RDND06:RDND06\$DKA100:[GER15.QA]CHECK.QAF;2

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.007300 Upper Bound : 0.007800

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 0.007601 Std Deviation : 0.000062

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 09:10	CHK		0.0076					
3-SEP-2007 07:20	CHK		0.0077					
4-SEP-2007 05:31	CHK		0.0076					
5-SEP-2007 05:36	CHK		0.0076					
6-SEP-2007 06:36	CHK		0.0076					
7-SEP-2007 06:34	CHK		0.0076					
8-SEP-2007 08:21	CHK		0.0076					
10-SEP-2007 05:17	CHK		0.0076					
11-SEP-2007 04:56	CHK		0.0075					
12-SEP-2007 05:12	CHK		0.0076					
13-SEP-2007 05:08	CHK		0.0076					
14-SEP-2007 05:04	CHK		0.0076					
15-SEP-2007 08:18	CHK		0.0077					
17-SEP-2007 05:05	CHK		0.0076					
18-SEP-2007 04:54	CHK		0.0075					
19-SEP-2007 05:36	CHK ✓		0.0076					
20-SEP-2007 05:09	CHK		0.0077					
20-SEP-2007 05:21	CHK		0.0076					
21-SEP-2007 05:07	CHK		0.0076					
24-SEP-2007 05:05	CHK		0.0075					

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 356.000000 Upper Bound : 556.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 09:10	CHK		455.7475		
3-SEP-2007 07:20	CHK		455.5985		
4-SEP-2007 05:31	CHK		455.6996		
5-SEP-2007 05:36	CHK		455.6204		
6-SEP-2007 06:36	CHK		455.6341		
7-SEP-2007 06:34	CHK		455.6000		
8-SEP-2007 08:21	CHK		455.4963		

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
10-SEP-2007 05:17	CHK		455.4958		
11-SEP-2007 04:56	CHK		455.5624		
12-SEP-2007 05:12	CHK		455.6324		
13-SEP-2007 05:08	CHK		455.5840		
14-SEP-2007 05:04	CHK		455.6163		
15-SEP-2007 08:18	CHK		455.5929		
17-SEP-2007 05:05	CHK		455.5716		
18-SEP-2007 04:54	CHK		455.5407		
19-SEP-2007 05:36	CHK ✓		455.5611		
20-SEP-2007 05:09	CHK		455.5113		
20-SEP-2007 05:21	CHK		455.5391		
21-SEP-2007 05:07	CHK		455.4798		
24-SEP-2007 05:05	CHK		455.5594		

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 1.043373 Std Deviation : 0.015692

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 09:10	CHK		1.0398					
3-SEP-2007 07:20	CHK		1.0512					
4-SEP-2007 05:31	CHK		1.0427					
5-SEP-2007 05:36	CHK		1.0346					
6-SEP-2007 06:36	CHK		1.0373					
7-SEP-2007 06:34	CHK		1.0460					
8-SEP-2007 08:21	CHK		1.0321					
10-SEP-2007 05:17	CHK		1.0444					
11-SEP-2007 04:56	CHK		1.0299					
12-SEP-2007 05:12	CHK		1.0320					
13-SEP-2007 05:08	CHK		1.0385					
14-SEP-2007 05:04	CHK		1.0345					
15-SEP-2007 08:18	CHK		1.0489					
17-SEP-2007 05:05	CHK		1.0567					
18-SEP-2007 04:54	CHK		1.0486					
19-SEP-2007 05:36	CHK		1.0335					
20-SEP-2007 05:09	CHK		1.0273					
20-SEP-2007 05:21	CHK		1.0628					
21-SEP-2007 05:07	CHK		1.0365					
24-SEP-2007 05:05	CHK		1.0580					

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.002320

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 0.001211 Std Deviation : 0.000168

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 09:10	CHK		0.0012					
3-SEP-2007 07:20	CHK		0.0013					
4-SEP-2007 05:31	CHK		0.0012					
5-SEP-2007 05:36	CHK		0.0012					
6-SEP-2007 06:36	CHK		0.0013					
7-SEP-2007 06:34	CHK		0.0012					
8-SEP-2007 08:21	CHK		0.0012					
10-SEP-2007 05:17	CHK		0.0012					
11-SEP-2007 04:56	CHK		0.0012					
12-SEP-2007 05:12	CHK		0.0012					
13-SEP-2007 05:08	CHK		0.0012					
14-SEP-2007 05:04	CHK		0.0012					
15-SEP-2007 08:18	CHK		0.0012					
17-SEP-2007 05:05	CHK		0.0012					
18-SEP-2007 04:54	CHK		0.0012					
19-SEP-2007 05:36	CHK		0.0012					
20-SEP-2007 05:09	CHK		0.0012					
20-SEP-2007 05:21	CHK		0.0013					
21-SEP-2007 05:07	CHK		0.0012					
24-SEP-2007 05:05	CHK		0.0013					

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5681.000000 Upper Bound : 5881.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 09:10	CHK		5784.7461					
3-SEP-2007 07:20	CHK		5784.1685					
4-SEP-2007 05:31	CHK		5783.7861					
5-SEP-2007 05:36	CHK		5783.7847					
6-SEP-2007 06:36	CHK		5783.9634					
7-SEP-2007 06:34	CHK		5784.7637					
8-SEP-2007 08:21	CHK		5784.5156					
10-SEP-2007 05:17	CHK		5783.9307					
11-SEP-2007 04:56	CHK		5783.7856					

12-SEP-2007 05:12	CHK	5783.9771			
13-SEP-2007 05:08	CHK	5784.1528			
14-SEP-2007 05:04	CHK	5783.0811			
15-SEP-2007 08:18	CHK	5783.2622			
17-SEP-2007 05:05	CHK	5783.0088			
18-SEP-2007 04:54	CHK	5783.2466			
19-SEP-2007 05:36	CHK ✓	5783.0313			
20-SEP-2007 05:09	CHK	5782.9136			
20-SEP-2007 05:21	CHK	5782.9668			
21-SEP-2007 05:07	CHK	5783.2061			
24-SEP-2007 05:05	CHK	5782.7720			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----
 Lower Bound : 1.511000 Upper Bound : 2.222000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----
 Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 1.877819 Std Deviation : 0.102255

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 09:10	CHK	1.8649			
3-SEP-2007 07:20	CHK	1.8473			
4-SEP-2007 05:31	CHK	1.7879			
5-SEP-2007 05:36	CHK	1.7334			
6-SEP-2007 06:36	CHK	1.9528			
7-SEP-2007 06:34	CHK	1.7741			
8-SEP-2007 08:21	CHK	1.8377			
10-SEP-2007 05:17	CHK	1.9222			
11-SEP-2007 04:56	CHK	1.9205			
12-SEP-2007 05:12	CHK	2.0981		In	
13-SEP-2007 05:08	CHK	1.8703			

14-SEP-2007 05:04	CHK	1.8810		
15-SEP-2007 08:18	CHK	1.9619		
17-SEP-2007 05:05	CHK	1.8318		
18-SEP-2007 04:54	CHK	1.7361		
19-SEP-2007 05:36	CHK ✓	1.9911		
20-SEP-2007 05:09	CHK	1.8409		
20-SEP-2007 05:21	CHK	1.9131		
21-SEP-2007 05:07	CHK	1.9759		
24-SEP-2007 05:05	CHK	1.9906		

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----
 Lower Bound : 0.001800 Upper Bound : 0.002100

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----
 Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 0.001961 Std Deviation : 0.000306

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 09:10	CHK		0.0020		
3-SEP-2007 07:20	CHK		0.0019		
4-SEP-2007 05:31	CHK		0.0020		
5-SEP-2007 05:36	CHK		0.0021		
6-SEP-2007 06:36	CHK		0.0020		
7-SEP-2007 06:34	CHK		0.0020		
8-SEP-2007 08:21	CHK		0.0019		
10-SEP-2007 05:17	CHK		0.0021		
11-SEP-2007 04:56	CHK		0.0021		
12-SEP-2007 05:12	CHK		0.0020		
13-SEP-2007 05:08	CHK		0.0021		
14-SEP-2007 05:04	CHK		0.0020		
15-SEP-2007 08:18	CHK		0.0020		
17-SEP-2007 05:05	CHK		0.0020		
18-SEP-2007 04:54	CHK		0.0019		
19-SEP-2007 05:36	CHK ✓		0.0020		
20-SEP-2007 05:09	CHK		0.0021	Ab	

20-SEP-2007 05:21 CHK 0.0020
 Quality Assurance Multi-Test Full Report (continued)

Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
21-SEP-2007 05:07	CHK		0.0020					
24-SEP-2007 05:05	CHK		0.0020					

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----
 Lower Bound : 3077.000000 Upper Bound : 3277.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 09:10	CHK		3178.7727					
3-SEP-2007 07:20	CHK		3178.5466					
4-SEP-2007 05:31	CHK		3178.2188					
5-SEP-2007 05:36	CHK		3178.1807					
6-SEP-2007 06:36	CHK		3178.1543					
7-SEP-2007 06:34	CHK		3178.5164					
8-SEP-2007 08:21	CHK		3178.5547					
10-SEP-2007 05:17	CHK		3178.4202					
11-SEP-2007 04:56	CHK		3178.0166					
12-SEP-2007 05:12	CHK		3178.4658					
13-SEP-2007 05:08	CHK		3178.2710					
14-SEP-2007 05:04	CHK		3177.8137					
15-SEP-2007 08:18	CHK		3177.7905					
17-SEP-2007 05:05	CHK		3177.8538					
18-SEP-2007 04:54	CHK		3177.8796					
19-SEP-2007 05:36	CHK		3177.7073					
20-SEP-2007 05:09	CHK		3177.6152					
20-SEP-2007 05:21	CHK		3177.7668					
21-SEP-2007 05:07	CHK		3177.9792					
24-SEP-2007 05:05	CHK		3177.5811					

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.280000 Upper Bound : 1.720000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 1.522860 Std Deviation : 0.076613

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 09:10	CHK		1.5021					
3-SEP-2007 07:20	CHK		1.6554					
4-SEP-2007 05:31	CHK		1.5195					
5-SEP-2007 05:36	CHK		1.4917					
6-SEP-2007 06:36	CHK		1.5160					

Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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7-SEP-2007 06:34	CHK		1.5136					
8-SEP-2007 08:21	CHK		1.5191					
10-SEP-2007 05:17	CHK		1.5626					
11-SEP-2007 04:56	CHK		1.6386					
12-SEP-2007 05:12	CHK		1.6404					
13-SEP-2007 05:08	CHK		1.5297					
14-SEP-2007 05:04	CHK		1.5387					
15-SEP-2007 08:18	CHK		1.5611					
17-SEP-2007 05:05	CHK		1.6938	In				
18-SEP-2007 04:54	CHK		1.6187					
19-SEP-2007 05:36	CHK		1.4533					
20-SEP-2007 05:09	CHK		1.6778	In				
20-SEP-2007 05:21	CHK		1.6069					
21-SEP-2007 05:07	CHK		1.6324					
24-SEP-2007 05:05	CHK		1.5483					

Quality Assurance Report. Generated 25-SEP-2007 13:50:33.10

QA Filename : RDND06::RDND06\$DKA100:[GER15.QA]BKG.QAF.2

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 0.000000 Std Deviation : 0.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	bkg		0.0000					
9-SEP-2007 06:54	bkg		0.0000					
16-SEP-2007 07:30	bkg		0.0000					
17-SEP-2007 05:38	bkg		0.0000					
23-SEP-2007 07:58	bkg		0.0000					

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 17.827131 Std Deviation : 1.043397

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	bkg		19.4140					
9-SEP-2007 06:54	bkg		18.1080					
16-SEP-2007 07:30	bkg		19.0575					
17-SEP-2007 05:38	bkg		17.7156					
23-SEP-2007 07:58	bkg		19.2798					

-- Multi-Test Full Report --

Description : MDA Co-60 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 25.471819 Std Deviation : 1.336739

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:28	bkg		27.9501		
9-SEP-2007 06:54	bkg		26.7243		
16-SEP-2007 07:30	bkg		25.9601		
17-SEP-2007 05:38	bkg		25.5500		
23-SEP-2007 07:58	bkg		25.9745		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 26.851849 Std Deviation : 1.326730

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:28	bkg		25.7834		
9-SEP-2007 06:54	bkg		28.5092		
16-SEP-2007 07:30	bkg		27.6455		
17-SEP-2007 05:38	bkg		27.6507		
23-SEP-2007 07:58	bkg		27.0274		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 21.555796 Std Deviation : 0.650726

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		22.7965		
9-SEP-2007 06:54	bkg		21.5385		
16-SEP-2007 07:30	bkg		22.3148		
17-SEP-2007 05:38	bkg		21.2310		
23-SEP-2007 07:58	bkg		23.0054	In	

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 24.019569 Std Deviation : 1.449432

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	bkg		23.9951		
9-SEP-2007 06:54	bkg		23.7641		
16-SEP-2007 07:30	bkg		25.0453		
17-SEP-2007 05:38	bkg		23.2617		
23-SEP-2007 07:58	bkg		24.2311		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : CPM Parameter Type : Nuclide

Quality Assurance Multi-Test Full Report (continued) Page : 3

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 21.406004 Std Deviation : 0.927077

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS Rej
2-SEP-2007 07:28	bkg		21.1315		
9-SEP-2007 06:54	bkg		22.5004		
16-SEP-2007 07:30	bkg		24.3665	Ac	
17-SEP-2007 05:38	bkg		20.3310		
23-SEP-2007 07:58	bkg		22.3317		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 18.397440 Std Deviation : 1.802250

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS Rej
2-SEP-2007 07:28	bkg		20.4106		
9-SEP-2007 06:54	bkg		20.3675		
16-SEP-2007 07:30	bkg		20.8333		
17-SEP-2007 05:38	bkg		19.0624		
23-SEP-2007 07:58	bkg		20.0914		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 29.479492 Std Deviation : 2.968082

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
Quality Assurance Multi-Test Full Report (continued)			Page : 4	

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:28	bkg		34.0617	
9-SEP-2007 06:54	bkg		32.7339	
16-SEP-2007 07:30	bkg		32.5302	
17-SEP-2007 05:38	bkg		31.5680	
23-SEP-2007 07:58	bkg		32.6546	

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 30.222523 Std Deviation : 2.478376

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:28	bkg		31.9232	
9-SEP-2007 06:54	bkg		31.0085	
16-SEP-2007 07:30	bkg		33.2423	
17-SEP-2007 05:38	bkg		31.5085	
23-SEP-2007 07:58	bkg		33.1712	

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 13.805021 Std Deviation : 1.325768

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	bkg		15.1628					
9-SEP-2007 06:54	bkg		15.2287					
16-SEP-2007 07:30	bkg		15.1446					
17-SEP-2007 05:38	bkg		14.4146					
23-SEP-2007 07:58	bkg		15.1975					

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 150.342712 Std Deviation : 8.807827

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	bkg		158.4681					
9-SEP-2007 06:54	bkg		159.8463					
16-SEP-2007 07:30	bkg		167.8923					
17-SEP-2007 05:38	bkg		156.7121					
23-SEP-2007 07:58	bkg		160.3246					

Analytical Data Package Prepared For
Brown and Caldwell

Radiochemical Analysis By

TAL Richland

2800 G.W. Way, Richland Wa, 99354, (509)-375-3731.

Assigned Laboratory Code: STLR

Data Package Contains _____ Pages

Report No.: 36846

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
35712		BGS-A1-02D	J7H240331-9	J5K441AA	9J5K4410	7241628
		BGS-A1-02S	J7H240331-8	J5K421AA	9J5K4210	7241628
		BGS-A1-05D	J7H240331-7	J5K4X1AA	9J5K4X10	7241628
		BGS-A1-05S	J7H240331-6	J5K4V1AA	9J5K4V10	7241628
		BGS-A1-06D	J7H240331-11	J5K5A1AA	9J5K5A10	7241628
		BGS-A1-06S	J7H240331-10	J5K461AA	9J5K4610	7241628
		BGS-A1-14D	J7H240331-5	J5K4N1AA	9J5K4N10	7241628
		BGS-A1-14S	J7H240331-4	J5K4M1AA	9J5K4M10	7241628
		BGS-A2-51D-1	J7H240331-2	J5K4J1AA	9J5K4J10	7241628
		BGS-A2-51D-2	J7H240331-3	J5K4K1AA	9J5K4K10	7241628
		BGS-A2-51S	J7H240331-1	J5K4G1AA	9J5K4G10	7241628
		BGS-A2-53D	J7H240331-13	J5K5M1AA	9J5K5M10	7241628
		BGS-A2-53S	J7H240331-12	J5K5K1AA	9J5K5K10	7241628
		BGS-A2-54D	J7H240331-15	J5K6C1AA	9J5K6C10	7241628
		BGS-A2-54S	J7H240331-14	J5K591AA	9J5K5910	7241628

Level II



TestAmerica

Certificate of Analysis

September 27, 2007

Brown & Caldwell
2701 Prospect Park Drive
Rancho Cordova, CA 95670

Attention: Penny Bassett

Date Received at Lab : August 23, 2007
Project Name : Yerington Mine Soils
Project Number : 132039
Enfos Number : 01KF-0109
PO Number : 129682.001
Sample Type : Fifteen (15) Soil Samples
SDG Number : 35712

CASE NARRATIVE

I. Introduction

On August 23, 2007, fifteen soil samples were received at the TestAmerica Laboratory Richland (TALR) laboratory for radiochemical analysis. Upon receipt, the samples were assigned TALR identification numbers as described on the cover page of the Analytical Data Package report form. The samples were assigned to Lot Number J7H240331.

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information; analytical results and the appropriate associated statistical uncertainties.

The analysis requested was:

Gamma
Gamma by method STL RICH-RC-5013/5017

IV. Quality Control

The analytical result for each analysis performed includes a minimum of one laboratory control sample (LCS), and one reagent blank sample analysis. Any exceptions have been noted in the "Comments" section.

Brown and Caldwell
September 27, 2007

V. Comments

Gamma

Gamma by method STL RICH-RC-5013/5017:

Sample BGS-A2-51S had insufficient sample volume for duplicate analysis. It was recounted on a different detector as a replicate. Except as noted, the LCS, batch blank, samples and sample duplicate results are within analytical requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:


Sherry A. Adam
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 00-02	Gross Alpha (Coprecipitation)	RICH-RC-5021
EPA 903.0	Total Alpha Radium (Ra-226)	RICH-RC-5027
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr-89/90	RICH-RC-5005
ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007

Uncertainty Estimation

Test America Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x,y,z,...)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_c) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1, 2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) <i>u_c Combined Uncertainty.</i>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, <i>u_c the combined uncertainty</i> . The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval. 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = 0.645 * \sqrt{2 * (BkgrndCnt / BkgrndCntMin) / SCntMin} * (ConvFct / (Eff * Yld * Abn * Vol)) * IngrFct$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC/MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{(BkgrndCnt / BkgrndCntMin) / SCntMin} + 2.71 / SCntMin) * (ConvFct / (Eff * Yld * Abn * Vol)) * IngrFct$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt(TPUs ² + TPUD ²)] as defined by KFT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUD is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/240 method.

RADIOLOGICAL FIELD DUPLICATE EVALUATION

REPLICATE ERROR RATIO (RER) LIMIT < 1.96

$$\text{RER} = \text{ABS} (\text{SAMPLE ACT} - \text{DUPLICATE ACT}) / \text{SQRT} [(\text{TPU SAMPLE})^2 + (\text{TPU DUPLICATE})^2]$$

SDG: 36846

Samples BGS-A2-51D-1 and BGS-A2-51D-2

Analyte	Sample Act	Sample TPU	Duplicate Act	Duplicate TPU	RER 1-sigma
Ra-226	0.982	0.132	0.875	0.121	1.195
Ra-228	0.874	0.154	0.89	0.143	0.152

Sample Results Summary
TAL Richland STLR
 Ordered by Method, Batch No., Client Sample ID.

Date: 27-Sep-07

Report No. : 36846

SDG No: 35712

Client Id	Batch	Work Order	Parameter	Result ± Uncertainty (2s)	Qual	Units	Trace Yield	MDC or MDA	CRDL	RER2
7241628 E901.1										
BGS-A1-02D										
✓ J5K441AA	RA-226			1.28 [✓] ± 0.161 [✓]	=	pCi/g		0.0308 [✓]		
	RA-228			1.50 [✓] ± 0.231 [✓]	=	pCi/g		0.0617 [✓]		
BGS-A1-02S										
✓ J5K421AA	RA-226			1.23 [✓] ± 0.159 [✓]	=	pCi/g		0.0373 [✓]		
	RA-228			1.41 [✓] ± 0.237 [✓]	=	pCi/g		0.0759 [✓]		
BGS-A1-05D										
✓ J5K4X1AA	RA-226			0.831 [✓] ± 0.118 [✓]	=	pCi/g		0.0442 [✓]		
	RA-228			0.941 [✓] ± 0.171 [✓]	=	pCi/g		0.0905 [✓]		
BGS-A1-05S										
✓ J5K4V1AA	RA-226			0.929 [✓] ± 0.125 [✓]	=	pCi/g		0.0302 [✓]		
	RA-228			0.963 [✓] ± 0.182 [✓]	=	pCi/g		0.0578 [✓]		
BGS-A1-06D										
✓ J5K5A1AA	RA-226			0.901 [✓] ± 0.119 [✓]	=	pCi/g		0.035 [✓]		
	RA-228			1.01 [✓] ± 0.169 [✓]	=	pCi/g		0.0656 [✓]		
BGS-A1-06S										
✓ J5K461AA	RA-226			0.871 [✓] ± 0.119 [✓]	=	pCi/g		0.037 [✓]		
	RA-228			0.960 [✓] ± 0.161 [✓]	=	pCi/g		0.0744 [✓]		
BGS-A1-14D										
✓ J5K4N1AA	RA-226			1.48 [✓] ± 0.187 [✓]	=	pCi/g		0.0383 [✓]		
	RA-228			1.41 [✓] ± 0.225 [✓]	=	pCi/g		0.0692 [✓]		
BGS-A1-14S										
✓ J5K4M1AA	RA-226			1.10 [✓] ± 0.154 [✓]	=	pCi/g		0.0424 [✓]		
	RA-228			1.00 [✓] ± 0.181 [✓]	=	pCi/g		0.0822 [✓]		
BGS-A2-51D-1										
✓ J5K4J1AA	RA-226			0.982 [✓] ± 0.132 [✓]	=	pCi/g		0.0408 [✓]		
	RA-228			0.874 [✓] ± 0.154 [✓]	=	pCi/g		0.086 [✓]		
BGS-A2-51D-2										
✓ J5K4K1AA	RA-226			0.876 [✓] ± 0.121 [✓]	=	pCi/g		0.0359 [✓]		
	RA-228			0.890 [✓] ± 0.143 [✓]	=	pCi/g		0.0882 [✓]		
BGS-A2-51S										
✓ J5K4G1AA	RA-226			0.986 [✓] ± 0.130 [✓]	=	pCi/g		0.0362 [✓]		
	RA-228			0.844 [✓] ± 0.151 [✓]	=	pCi/g		0.0718 [✓]		
BGS-A2-51S DUP										
✓ J5K4G1AC	RA-226			0.923 [✓] ± 0.122 [✓]	=	pCi/g		0.0426 [✓]		} RER ou!
	RA-228			0.879 [✓] ± 0.156 [✓]	=	pCi/g		0.0842 [✓]		
BGS-A2-53D										
✓ J5K5M1AA	RA-226			2.43 [✓] ± 0.309 [✓]	=	pCi/g		0.0547 [✓]		
	RA-228			1.73 [✓] ± 0.266 [✓]	=	pCi/g		0.109 [✓]		

TAL Richland RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPU_s)+sq(TPU_d))] as defined by ICPT BOA.
 rptSTLRchSaSummary2 V5.1.4
 A2002 = ERPIMS - Equal To, Analyte Detected

Sample Results Summary
TAL Richland STLR
 Ordered by Method, Batch No., Client Sample ID.

Date: 27-Sep-07

Report No. : 36846

SDG No: 35712

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RER2
7241628	E901.1								
	BGS-A2-53S								
	J5K5K1AA	RA-226	1.90 +- 0.239	=	pCi/g		0.0385		
		RA-228	1.73 +- 0.307	=	pCi/g		0.062		
	BGS-A2-54D								
	J5K6C1AA	RA-226	1.38 +- 0.175	=	pCi/g		0.0297		
		RA-228	1.68 +- 0.260	=	pCi/g		0.0562		
	BGS-A2-54S								
	J5K591AA	RA-226	1.13 +- 0.148	=	pCi/g		0.0352		
		RA-228	1.51 +- 0.258	=	pCi/g		0.0695		
No. of Results:		32							

Level II

TAL Richland RER2 - Replicate Error Ratio = $(S-D)/\sqrt{\text{sq}(TPUs)+\text{sq}(TPUd)}}$ as defined by ICPT BOA.
 rptSTLRchSaSum = ERPIMS - Equal To, Analyte Detected
 mary2 V5.1.4
 A2002

QC Results Summary
TAL Richland STLR
 Ordered by Method, Batch No, QC Type,.

Date: 27-Sep-07

Report No. : 36846

SDG No.: 35712

Batch	Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC MDA
E901.1	7241628	BLANK QC,							
	✓ J5WEW1AA	RA-226	-0.0419 ± 0.0512 ✓	N	pCi/g				0.0616 ✓
		RA-228	-0.0788 ± 0.0822 ✓	N	pCi/g				0.105 ✓
	7241628	LCS,							
	✓ J5WEW1AC	CS-137	1.17 ± 0.149 ✓	=	pCi/g		114%	0.1	0.0238 ✓
✓ No. of Results: 3									

TAL Richland Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchQcSummary V5.1.4 A2002 = ERPIMS - Equal To, Analyte Detected
 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-9
Client Sample ID: BGS-A1-02D

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 9:45:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K441AA		Report DB ID: 9J5K4410					
RA-226	1.28	=	0.16	0.16	0.0308	pCi/g		(41.5) (15.9)	9/20/07 08:32 a	341.0	g	GER11S1
RA-228	1.50	=	0.23	0.23	0.0617	pCi/g		(24.2) (12.9)	9/20/07 08:32 a	341.0	g	GER11S1
No. of Results: 2	Comments:											

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-8
Client Sample ID: BGS-A1-02S

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 9:45:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K421AA		Report DB ID: 9J5K4210					
RA-226	1.23	=	0.16	0.16	0.0373	pCi/g	(32.8) (15.4)	9/20/07 06:30 a		354.5	g	GER13S1
RA-228	1.41	=	0.24	0.24	0.0759	pCi/g	(18.6) (11.9)	9/20/07 06:30 a		354.5	g	GER13S1
No. of Results: 2	Comments:											

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-7
Client Sample ID: BGS-A1-05D

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 8:30:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4X1AA		Report DB ID: 9J5K4X10					
RA-226	0.831	=	0.12	0.12	0.0442	pCi/g	(18.8)		9/20/07 05:27 a	360.2	360.2	GER14\$1
							(14.)				g	
RA-228	0.941	=	0.17	0.17	0.0905	pCi/g	(10.4)		9/20/07 05:27 a	360.2	360.2	GER14\$1
							(11.)				g	

No. of Results: 2 Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-6
Client Sample ID: BGS-A1-05S

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 8:30:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4V1AA		Report DB ID: 9J5K4V10					
RA-226	0.929	=	0.12	0.12	0.0302	pCi/g		(30.8) (14.9)	9/20/07 05:27 a	349.6	g	GER12\$1
RA-228	0.963	=	0.18	0.18	0.0578	pCi/g		(16.6) (10.6)	9/20/07 05:27 a	349.6	g	GER12\$1

No. of Results: 2 Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-11
Client Sample ID: BGS-A1-06D

SDG: 35712
Report No.: 36846
COC No.:

Collection Date: 8/15/2007 10:45:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K5A1AA		Report DB ID: 9J5K5A10					
RA-226	0.901	=	0.12	0.12	0.035	pCi/g		(25.8) (15.2)	9/20/07 04:01 p		326.1 g	GER10S1
RA-228	1.01	=	0.17	0.17	0.0656	pCi/g		(15.4) (11.9)	9/20/07 04:01 p		326.1 g	GER10S1
No. of Results: 2	Comments:											

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-10
Client Sample ID: BGS-A1-06S

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 10:45:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K461AA		Report DB ID: 9J5K4610					
RA-226	0.871	=	0.12	0.12	0.037	pCi/g		(23.5) (14.6)	9/20/07 04:00 p		351.5 g	GER8\$1
RA-228	0.960	=	0.16	0.16	0.0744	pCi/g		(12.9) (11.9)	9/20/07 04:00 p		351.5 g	GER8\$1
No. of Results: 2	Comments:											

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-5
Client Sample ID: BGS-A1-14D

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 7:30:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4N1AA		Report DB ID: 9J5K4N10					
RA-226	1.48	=	0.19	0.19	0.0383	pCi/g	(38.6) (15.8)		9/20/07 05:27 a		324.4 g	GER10S1
RA-228	1.41	=	0.23	0.23	0.0692	pCi/g	(20.3) (12.5)		9/20/07 05:27 a		324.4 g	GER10S1

No. of Results: 2 Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-4
Client Sample ID: BGS-A1-14S

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 7:30:00 AM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4M1AA		Report DB ID: 9J5K4M10					
RA-226	1.10	=	0.15	0.15	0.0424	pCi/g	(26.) (14.3)	9/20/07 05:27 a		340.0	g	GER7\$1
RA-228	1.00	=	0.18	0.18	0.0822	pCi/g	(12.2) (11.1)	9/20/07 05:27 a		340.0	g	GER7\$1

No. of Results: 2 Comments:

TAL Richland MDC|MDA.Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-2
Client Sample ID: BGS-A2-51D-1

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/14/2007 3:00:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Allquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4J1AA		Report DB ID: 9J5K4J10					
RA-226	0.982	=	0.13	0.13	0.0408	pCi/g		(24.1) (14.9)	9/20/07 05:26 a		343.8 g	GER6\$1
RA-228	0.874	=	0.15	0.15	0.086	pCi/g		(10.2) (11.3)	9/20/07 05:26 a		343.8 g	GER6\$1
No. of Results: 2	Comments:											

FORM I
SAMPLE RESULTS

Date: 27 Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-3
Client Sample ID: BGS-A2-51D-2

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/14/2007 3:00:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4K1AA			Report DB ID: 9J5K4K10				
RA-226	0.876	=	0.12	0.12	0.0359	pCi/g		(24.4) (14.5)	9/20/07 05:26 a		359.0 g	GER8\$1
RA-228	0.890	=	0.14	0.14	0.0682	pCi/g		(13.1) (12.5)	9/20/07 05:26 a		359.0 g	GER8\$1
No. of Results: 2	Comments:											

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-1
Client Sample ID: BGS-A2-51S

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/14/2007 3:00:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4G1AA		Report DB ID: 9J5K4G10					
RA-226	0.986	=	0.13	0.13	0.0362	pCi/g		(27.2) (15.1)	9/20/07 05:26 a		353.3 g	GER5\$1
RA-228	0.844	=	0.15	0.15	0.0718	pCi/g		(11.8) (11.2)	9/20/07 05:26 a		353.3 g	GER5\$1
No. of Results: 2		Comments:										

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-13
Client Sample ID: BGS-A2-53D

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 12:30:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Allquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K5M1AA			Report DB ID: 9J5K5M10				
RA-226	2.43	=	0.31	0.31	0.0547	pCi/g		(44.4) (15.7)	9/20/07 04:02 p		338.2 g	GER14\$1
RA-228	1.73	=	0.27	0.27	0.109	pCi/g		(15.8) (13.)	9/20/07 04:02 p		338.2 g	GER14\$1
No. of Results: 2	Comments:											

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-12
Client Sample ID: BGS-A2-53S

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 12:30:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K5K1AA		Report DB ID: 9J5K5K10					
RA-226	1.90	=	0.24	0.24	0.0335	pCi/g		(56.7) (15.9)	9/20/07 04:02 p		355.4 g	GER12S1
RA-228	1.73	=	0.31	0.31	0.062	pCi/g		(27.9) (11.3)	9/20/07 04:02 p		355.4 g	GER12S1
No. of Results: 2	Comments:											

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
 V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I
SAMPLE RESULTS

Date: 27-Sep-07

Lab Name: TA Richland
Lot-Sample No.: J7H240331-15
Client Sample ID: BGS-A2-54D

SDG: 35712
Report No. : 36846
COC No. :

Collection Date: 8/15/2007 1:15:00 PM
Received Date: 8/23/2007 10:00:00 AM
Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Allquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K6C1AA			Report DB ID: 9J5K6C10				
RA-226	1.38	=	0.18	0.18	0.0297	pCi/g		(46.6) (15.8)	9/20/07 06:37 p		360.6 g	GER11\$1
RA-228	1.68	=	0.26	0.26	0.0562	pCi/g		(30.) (13.)	9/20/07 06:37 p		360.6 g	GER11\$1

No. of Results: 2 Comments:

TAL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
rptSTLRchSample = ERPIMS - Equal To, Analyte Detected
V5.1.4 A2002 D Qual - Result is greater than 3 times 1s Total Uncertainty

FORM I

Date: 27-Sep-07

SAMPLE RESULTS

Lab Name: TA Richland
 Lot-Sample No.: J7H240331-14
 Client Sample ID: BGS-A2-54S

SDG: 35712
 Report No.: 36846
 COC No.:

Collection Date: 8/15/2007 1:15:00 PM
 Received Date: 8/23/2007 10:00:00 AM
 Matrix: SOIL SO

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K591AA		Report DB ID: 9J5K5910					
RA-226	1.13	=	0.15	0.15	0.0352	pCi/g		(32.2) (15.3)	9/20/07 04:36 p		373.4 g	GER13S1
RA-228	1.51	=	0.26	0.26	0.0695	pCi/g		(21.8) (11.7)	9/20/07 04:36 p		373.4 g	GER13S1
No. of Results: 2	Comments:											

FORM II

Date: 27-Sep-07

DUPLICATE RESULTS

Lab Name: TA Richland

SDG: 35712

Collection Date: 8/14/2007 3:00:00 PM

Lot-Sample No.: J7H240331-1

Report No. : 36846

Received Date: 8/23/2007 10:00:00 AM

Client Sample ID: BGS-A2-51S DUP

COC No. :

Matrix: SOIL SO

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5K4G1AC				Report DB ID: J5K4G1CR			Orig Sa DB ID: 9J5K4G10
RA-226	0.923	=	0.12	0.12	0.0426	pCi/g		(21.7)	9/20/07 03:59 p		353.3	GER6\$1
	0.986	=	RER2 0.7					(15.1)			g	
RA-228	0.879	=	0.16	0.16	0.0842	pCi/g		(10.4)	9/20/07 03:59 p		353.3	GER6\$1
	0.844	=	RER2 0.3					(11.3)			g	

No. of Results: 2 Comments:

TAL Richland RER2 - Replicate Error Ratio = (S-D)/sqrt(sq(TPU)+sq(TPUD)) as defined by ICFP BOA.
 rptSTLRchDupV5.1 MDC|MDA,Le - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 .4 A2002 = ERPIMS - Equal To, Analyte Detected

FORM II
BLANK RESULTS

Date: 27-Sep-07

Lab Name: TA Richland

SDG: 35712

Matrix: SOIL

Report No. : 36846

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Lc	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7241628	E901.1				Work Order: J5WEW1AA			Report DB ID: J5WEW1AB				
RA-226	-0.0419	ND	0.051	0.051	0.0616	pCi/g		-0.68	9/20/07 05:35 a		200.1	GER15\$1
								-(1.6)			g	
RA-228	-0.0788	ND	0.082	0.082	0.105	pCi/g		-0.75	9/20/07 05:35 a		200.1	GER15\$1
								-(1.9)			g	
No. of Results: 2	Comments:											

FORM II
LCS RESULTS

Date: 27-Sep-07

Lab Name: TA Richland

SDG: 35712

Matrix: SOIL

Report No. : 36846

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Allquot Size	Primary Detector
Batch: 7241628	E901.1												
CS-137	1.17	=	0.15	0.15	0.0238	pCi/g		1.03	2.4	114%	9/20/07 04:03 p	201.1	GER15\$1
							Rec Limits:	70	130	0.1		g	
No. of Results: 1	Comments:												

CHAIN OF CUSTODY

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702-938-4080 / FAX 702-938-4082

201 East Washington Street / Suite 100
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YERS000333

PROJECT NAME: **Yerington Mine Site** LABORATORY NAME & ADDRESS: **SEVERN TRENT LABS, RICHLAND, WA**

PROJECT NUMBER: **132039**

J7H240331

35712

Due 09-12-07

LINE NO.	SAMPLE - I.D.	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.)		PB READINGS (ppm)
		DATE	TIME											BEGIN	END	
01	BGS-A2-53S	8-15-07	12:30	PB	1	9 oz Glass	NONE	S	<i>PB</i> EPA 902.0, EPA 904.0 (HASL 300 (U, TH)) <i>Ra-226, 228</i>			<i>J5K5K</i>		0.1	0.8	
02	BGS-A2-53D	↓	↓	↓	1	9 oz Glass	NONE	S	<i>PB</i> EPA 903.0, EPA 904.0 (HASL 300 (U, TH)) ↓			<i>J5K5M</i>		2	3	
03																
04																
05																
06																
07																
08																
09																
10																

COLLECTED & RELEASED BY: <i>Penny [Signature]</i>	DATE <i>8/22/07</i>	TIME <i>14:00</i>	COOLER I.D.:		COMMENTS (see note on back):
RECEIVED BY: <i>[Signature]</i>	DATE <i>8/23/07</i>	TIME <i>10:00</i>	RELINQUISHED BY:	DATE <i>1/1</i>	TIME
RECORD RETURNED BY:	DATE <i>1/1</i>	TIME			
COURIER:			SHIPPING NUMBER:		<i>Entas Billing 001KF-0109</i>

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201 East Washington Street / Suite 100
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

YERS000335

PROJECT NAME: Yerington Mine Site LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA
PROJECT NUMBER: 132039

J7H240331 35712 Due 09-14-07

LINE NO.	SAMPLE - I.D.	COLLECTION DATE	COLLECTION TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN	DEPTH (FT.) END	PD READING (ppm)
01	BGS-A2-54S	8-15-07	1315	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (H, TH) <u>Pa-226, 228</u>			J5K59		0.1	0.8	
02	BGS-A2-54D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (H, TH) ↓			J5K6C		2	3	
03																
04																
05																
06																
07																
08																
09																
10																

COLLECTED & RELEASED BY: <u>[Signature]</u>	DATE: <u>8-22-07</u>	TIME: <u>14:00</u>	COOLER I.D.:	RECEIVED BY: <u>[Signature]</u>	DATE: <u>8-23-07</u>	TIME: <u>10:00</u>	RELINQUISHED BY:	DATE: <u>1/1</u>	TIME:	COMMENTS (see note on back):
RECORD RETURNED BY:	DATE: <u>1/1</u>	TIME:								<u>Enfas Billing</u>
COURIER:			SHIPPING NUMBER:							<u>001RF-0109</u>

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK.

TAL RICHLAND

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

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201 East Washington Street / Suite 300
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

SEVERN S000239

PROJECT NAME: **Yerington Mine Site** LABORATORY NAME & ADDRESS: **SEVERN TRENT LABS, RICHLAND, WA**
 PROJECT NUMBER: **132039**

J7H240331 35712 Due 09-14-07

LINE NO.	SAMPLE - I.D.	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	OC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.) BEGIN ----- END	PID RESIDUE (ppm)
		DATE	TIME												
01	BGS-A1-06S	8-15-07	10:45	PB	1	9 oz Glass	NONE	S	<i>PB</i> EPA 903.0, EPA 904.0, <u>HASL 300 (P, TH)</u> <i>Re-226, 228</i>			J5K46		0.1 0.8	
02	BGS-A1-06D	↓	↓	↓	1	9 oz Glass	NONE	S	<i>PB</i> EPA 903.0, EPA 904.0, <u>HASL 300 (P, TH)</u> ↓			J5K5A		2 3	
03														---	
04														---	
05														---	
06														---	
07														---	
08														---	
09														---	
10														---	

COLLECTED & RELEASED BY: <i>[Signature]</i>	DATE: <i>8-26-07</i>	TIME: <i>1400</i>	COOLER I.D.:	COMMENTS (see note on back):
RECEIVED BY: <i>[Signature]</i>	DATE: <i>8-20-07</i>	TIME: <i>10:00</i>	RELINQUISHED BY:	
RECORD RETURNED BY:	DATE: <i>1/1</i>	TIME: <i>:</i>		<i>Enfos Billing 001 KF - 0109</i>
COURIER:			SHIPPING NUMBER:	

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201 East Washington Street / Suite 500
Phoenix, AZ 85004
602-567-4000 / FAX 602-567-4001

PER S000231

TAL RICHLAND

PROJECT NAME: **Yerington Mine Site** LABORATORY NAME & ADDRESS: **SEVERN TRENT LABS, RICHLAND, WA**
 PROJECT NUMBER: **132039**

J7H240331 35712 Duw 09/14/07

LINE NO.	SAMPLE - I.D.	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REG	TAT	SAMPLING METHOD	DEPTH (FT.)		PG. READING (ppm)
		DATE	TIME											BEGIN	END	
01	BGS-A1-02S	08-15-07	0945	PB	1	9 oz Glass	NONE	S	EPA 909.0, EPA 904.0, HASL 300 (U, TH) <i>Ra-226, 228</i>		M	J5K42		---	0.1	
02	BGS-A1-02D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) ↓			J5K44		---	2	
03														---		
04														---		
05														---		
06														---		
07														---		
08														---		
09														---		
10														---		

COLLECTED & RELEASED BY: <i>[Signature]</i>	DATE: 8/20/07	TIME: 1400	COOLER I.D.:	COMMENTS (see note on back):
RECEIVED BY: <i>[Signature]</i>	DATE: 8/30/07	TIME: 10:00	RELINQUISHED BY:	
RECORD RETURNED BY:	DATE: / /	TIME: :		<i>Entas Billing 001 KF-0109</i>
COURIER:			SHIPPING NUMBER:	

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

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Phoenix, AZ 85004
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YERS000237

TAL RICHLAND

PROJECT NAME: Yerington Mine Site	LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA
PROJECT NUMBER: 132039	

J7H240331 35712 Due 09.14.07

LINE NO.	SAMPLE - I.D.	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.)		PID RECORDING (ppm)
		DATE	TIME											BEGIN	END	
01	BGS-A1-05S	8-15-07	0830	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) → Ra-226, 228			J5K4V		---	0.1	
02	BGS-A1-05D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) ↓			J5K4X		---	2	
03														---		
04														---		
05														---		
06														---		
07														---		
08														---		
09														---		
10														---		

COLLECTED & RELEASED BY: <i>[Signature]</i>	DATE: 8/20/07	TIME: 15:00	COOLER I.D.:		COMMENTS (see note on back):
RECEIVED BY: <i>[Signature]</i>	DATE: 8/20/07	TIME: 10:00	RELINQUISHED BY:	DATE: / /	TIME: :
RECORD RETURNED BY:	DATE: / /	TIME: :			
COURIER:			SHIPPING NUMBER:		Enfas Billing COLKF-0109

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

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YERS000255

TAL RICHLAND

PROJECT NAME: Yerington Mine Site LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA
PROJECT NUMBER: 132039

J7H240331 35712 Due 09.14.07

LINE NO.	SAMPLE - I.D.	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.)		P/P RESIDING (ppm)
		DATE	TIME											BEGIN	END	
01	BGS-A1-14S	8-15-07	0730	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, (ASL 300 (U, TH)) Ra-226, 228			J5K4M		0.1	0.8	
02	BGS-A1-14D	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, (ASL 300 (U, TH)) ↓			J5K4N		2	3	
03														---	---	
04														---	---	
05														---	---	
06														---	---	
07														---	---	
08														---	---	
09														---	---	
10														---	---	

COLLECTED & RELEASED BY: <i>[Signature]</i>	DATE: 8/22/07	TIME: 14:00	COOLER I.D.:		COMMENTS (see note on back):
RECEIVED BY: <i>[Signature]</i>	DATE: 8/30/07	TIME: 10:00	RELINQUISHED BY:	DATE: / /	TIME: :
RECORD RETURNED BY:	DATE: / /	TIME: :			
COURIER:			SHIPPING NUMBER:		

Enfos Billing
001KF-0109

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK.

TAL RICHLAND

BROWN AND CALDWELL

CHAIN OF CUSTODY RECORD

COC No. _____

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YER S000329

PROJECT NAME: Yerington Mine Site LABORATORY NAME & ADDRESS: SEVERN TRENT LABS, RICHLAND, WA
PROJECT NUMBER: 132039

J7H240331 35712 Due 09-14-07

LINE NO.	SAMPLE - I.D.	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	FIELD FILTERED	QC - REQ	TAT	SAMPLING METHOD	DEPTH (FT.)		PID RESIDUE (ppm)
		DATE	TIME											BEGIN	END	
01	BGS-A2-51S	8/14/07	1500	PB	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH) <u>Re-226, 228</u>			J5K4G		0.1	0.8	
02	BGS-A2-51D-1	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH)			J5K4J		2	3	
03	BGS-A2-51D-2	↓	↓	↓	1	9 oz Glass	NONE	S	EPA 903.0, EPA 904.0, HASL 300 (U, TH)			J5K4K		2	3	
04														----	----	
05														----	----	
06														----	----	
07														----	----	
08														----	----	
09														----	----	
10														----	----	

COLLECTED & RELEASED BY: <u>[Signature]</u>	DATE: <u>8/22/07</u>	TIME: <u>1500</u>	COOLER I.D.:	RECEIVED BY: <u>[Signature]</u>	DATE: <u>8/23/07</u>	TIME: <u>10:00</u>	RELINQUISHED BY:	DATE: <u>11</u>	TIME:	COMMENTS (see note on back): <u>Level 4</u>
RECORD RETURNED BY:	DATE: <u>11</u>	TIME:								
COURIER:			SHIPPING NUMBER:							<u>001KF-0109</u>

DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK.



STL

Sample Check-in List

Date/Time Received: 8-23-07 1000

Client: BRC SDG #: 35712 NA SAF #: _____ NA

Work Order Number: J7H240331 Chain of Custody # _____

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: _____ NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 15
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 _____ tape _____ hazard labels
 _____ custody seals _____ appropriate samples labels
9. Samples are:
 _____ in good condition _____ leaking
 _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? SOIL NA pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? * Yes No
 *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [Signature] Date: 8-23-07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

GAMMA

SAMPLE AND QC DATA

Lot No., Due Date: J7H240331; 09/14/2007
Client, Site: 536403; BRC GW/SOIL Yerington Quarterly GW/Soil
QC Batch No., Method Test: 7241628; RGAMMA Gamma by GER
SDG, Matrix: 35712; SOIL

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

✓ Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

✓ Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

✓ Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

✓ Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

✓ Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

✓ Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

✓ Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

✓ Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

✓ Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

✓ Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

✓ Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

✓ Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

✓ Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

✓ Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

✓ Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

✓ Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

✓ Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

✓ Yes No N/A

5.4 Was transcription checked? Yes No N/A

✓ Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

✓ Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

✓ Yes No N/A

6.0 Comments on any No response:
 See NCM # 10-10915 for information on the duplicate.

First Level Review

Matt Lorder

Date

9-26-07



Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 7241628

Review Item	Yes (✓)	No (✓)	NA (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: See NCM

Second Level Review: *Sheryl R. Adams* Date: 9-26-07

TAL RICHLAND

9/4/2007 10:21:38 AM

Sample Preparation/Analysis

Balance Id:n/a

536403, Brown and Caldwell
and Caldwell

, Brown

AX Gamma PrpRC5013/5017

TA Gamma by HPGE *10 day ingrowth*

Pipet #: _____

AnalyDueDate: 09/10/2007

01 STANDARD TEST SET

Sep1 DT/Tm Tech:

Batch: 7241628 SOIL pCi/g

PM, Quote: SA , 73181

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7241628 AXTA,

Prep Tech: ,Barcotti

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 J5K4G-1-AA J7H240331-1-SAMP 08/14/2007 15:00		353.30g.in								
			AmtRec: JAR80ZG	#Containers: 1				Scr: Alpha: Beta:		<i>5200 9/20/07 1506 9/20/07</i>
2 J5K4G-1-AC-X J7H240331-1-DUP 08/14/2007 15:00										
			AmtRec: JAR80ZG	#Containers: 1				Scr: Alpha: Beta:		<i>Not enough sample recount sample 60 / 0159 9/20/07</i>
3 J5K4J-1-AA J7H240331-2-SAMP 08/14/2007 15:00		343.80g.in								
			AmtRec: JAR80ZG	#Containers: 1				Scr: Alpha: Beta:		<i>5200 66 ✓ 1526 9/20/07</i>
4 J5K4K-1-AA J7H240331-3-SAMP 08/14/2007 15:00		359.00g.in								
			AmtRec: JAR80ZG	#Containers: 1				Scr: Alpha: Beta:		<i>68 ✓ 1526</i>
5 J5K4M-1-AA J7H240331-4-SAMP 08/15/2007 07:30		340.00g.in								
			AmtRec: JAR80ZG	#Containers: 1				Scr: Alpha: Beta:		<i>67 ✓ 1527</i>
6 J5K4N-1-AA J7H240331-5-SAMP 08/15/2007 07:30		324.40g.in								
			AmtRec: JAR80ZG	#Containers: 1				Scr: Alpha: Beta:		<i>610 ✓ 1527</i>
7 J5K4V-1-AA J7H240331-6-SAMP 08/15/2007 08:30		349.60g.in								
			AmtRec: JAR80ZG	#Containers: 1				Scr: Alpha: Beta:		<i>612 ✓ 1527</i>

STL RICHLAND

9/4/2007 10:21:38 AM

Sample Preparation/Analysis

Balance Id:n/a

536403, Brown and Caldwell and Caldwell, Brown

AX Gamma PrpRC5013/5017

Pipet #: _____

TA Gamma by HPGE

AnalyDueDate: 09/10/2007

01 STANDARD TEST SET

Sep1 DT/Tm Tech: _____

Batch: 7241628 SOIL

pCi/g

PM, Quote: SA, 73181

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: ,Barcott



Work Order, Lot, Sample Date	Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 J5K4X-1-AA			360.20g,in			5200	1000	G14	1527	9/20/07	
J7H240331-7-SAMP											
08/15/2007 08:30				AmtRec: JAR80ZG	#Containers: 1				Scr:	Alpha:	Beta:
9 J5K42-1-AA			354.50g,in					G13	1630		
J7H240331-8-SAMP											
08/15/2007 09:45				AmtRec: JAR80ZG	#Containers: 1				Scr:	Alpha:	Beta:
10 J5K44-1-AA			341.00g,in					G11	1832	9/20/07	
J7H240331-9-SAMP											
08/15/2007 09:45				AmtRec: JAR80ZG	#Containers: 1				Scr:	Alpha:	Beta:
11 J5K46-1-AA			351.50g,in					G8	0200	9/20/07	
J7H240331-10-SAMP											
08/15/2007 10:45				AmtRec: JAR80ZG	#Containers: 1				Scr:	Alpha:	Beta:
12 J5K5A-1-AA			326.10g,in					G10	0201	9/20/07	
J7H240331-11-SAMP											
08/15/2007 10:45				AmtRec: JAR80ZG	#Containers: 1				Scr:	Alpha:	Beta:
13 J5K5K-1-AA			355.40g,in					G12	0202	9/20/07	
J7H240331-12-SAMP											
08/15/2007 12:30				AmtRec: JAR80ZG	#Containers: 1				Scr:	Alpha:	Beta:
14 J5K5M-1-AA			338.20g,in					G14	0202	9/20/07	
J7H240331-13-SAMP											
08/15/2007 12:30				AmtRec: JAR80ZG	#Containers: 1				Scr:	Alpha:	Beta:

STL RICHLAND

9/4/2007 10:21:39 AM

Sample Preparation/Analysis

Balance Id:n/a

536403, Brown and Caldwell
and Caldwell

, Brown

AX Gamma PrpRC5013/5017

Pipet #: _____

TA Gamma by HPGE

01 STANDARD TEST SET

Sep1 DT/Tm Tech: _____

AnalyDueDate: 09/10/2007

Batch: 7241628 SOIL

pCi/g

PM, Quote: SA , 73181

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: ,Barcotl



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 J5K59-1-AA J7H240331-14-SAMP 08/15/2007 13:15	373.40g,in						G13	0236	a/20/07	
16 J5K6C-1-AA J7H240331-15-SAMP 08/15/2007 13:15	360.60g,in						G11	0437	a/20/07	
17 J5WEW-1-AA-B J7H290000-628-BLK 08/14/2007 15:00	200.10g,in						G15 1535	9/20/07		
18 J5WEW-1-AC-C J7H290000-628-LCS 08/14/2007 15:00	201.10g,in		GSE1138 08/29/07,pd 06/08/05,r				G15	0203	9/20/07	

Comments: Not enough sample please recount on separate Detectors. 10 day ingrowth started 7/4/07 JM
for Dup

All Clients for Batch:

536403, Brown and Caldwell, Brown and Caldwell, SA, 73181

J5K4G1AA-SAMP Constituent List:

Constituent	RDL	Unit	LCL	UCL	RPD	Constituent	RDL	Unit	LCL	UCL	RPD
Cs-137	0.2	pCi/g	70	130	35	Cs-137DA	0.2	pCi/g	70	130	35
J5WEW1AA-BLK: Cs-137	0.2	pCi/g				Cs-137DA	0.2	pCi/g			
J5WEW1AC-LCS: Cs-137	0.2	pCi/g	70	130	35	Cs-137DA	0.2	pCi/g	70	130	35

STL Richland Key: In - Initial Amt, fi - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 3
Richland Wa pd Prep Dt, r - Reference Dt ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 18
Prep. SamplePrep v4.8.26

41

TAL RICHLAND

9/4/2007 10:21:40 AM

Sample Preparation/Analysis

Balance id:n/a

AX Gamma PrpRC5013/5017

Pipet #: _____

TA Gamma by HPGE

01 STANDARD TEST SET

AnalyDueDate: 09/10/2007

Sep1 DT/Tm Tech:

Batch: 7241628

pCi/g

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,Barcotl



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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J5K4G1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

J5WEW1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

J5WEW1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

Clouseau Nonconformance Memo

TestAmerica

THE QUALITY PERFORMANCE PARTNER

NCM #: 10-10915 NCM Initiated By: Matt Lardy Date Opened: 09/26/2007 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Environmental - Prep Tests: Gamma by GER Lot #'s (Sample #'s): J7H240331 (1) QC Batches: 7241628
Nonconformance: Insufficient sample volume for QC Subcategory: Other (explanation required)	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Matt Lardy	09/26/2007	Customer: BRC There was an insufficient amount of sample J5K4G1AA remaining to prepare a duplicate. Therefore sample J5K4G1AA was recounted as duplicate sample J5K4G1AC.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Matt Lardy	09/26/2007	The results will be reported.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>	<u>Response Note</u>	

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
			This section not yet completed by QA.

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>

9/26/2007 11:52:07 AM

ICOC Fraction Transfer/Status Report

By Date: 9/26/2006, 10/1/2007, Batch: '7241628', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7241628				
AC	CalcC	WoodT	9/4/2007 10:35:42	
SC		wagarr	IsBatched 8/29/2007 4:22:17 PM	ICOC_RADCALC v4.8.26
SC		WoodT	Prep2C 9/4/2007 10:35:42 AM	RICH-PC-5017 REVISION 6
SC		Barcotl	InPrep 9/4/2007 10:36:44 AM	RICH-PC-5013 REVISION 7
SC		Barcotl	Prep1C 9/4/2007 10:37:12 AM	RICH-PC-5016 REVISION 7
SC		Barcotl	InPrep2 9/4/2007 10:37:51 AM	RICH-PC-5017 REVISION 6
SC		BlackCL	InCnt1 9/4/2007 10:41:52 AM	RICH-RD-0007 REVISION 6
SC		StringerR	CalcC 9/21/2007 8:26:36 AM	RICH-RD-0007 REVISION 6
AC		Barcotl	9/4/2007 10:36:44	
AC		Barcotl	9/4/2007 10:37:12	
AC		Barcotl	9/4/2007 10:37:51	
AC		Barcotl	9/4/2007 10:38:05	
AC		BlackCL	9/4/2007 10:41:52	
AC		StringerR	9/21/2007 8:26:36	

AC: Accepting Entry; SC: Status Change

STL Fichland
Richland Wa.

9/26/2007 11:52:05 AM

Rpt DB Transfer log (Batch Results)

SDG or Batch Isotope	Rpt Db Id Method	RTst	Qt	Lot Sample Analysis Date	Client Id Result	Matrix	Received Date	Sample Date	Expected Yield	Volumes
						Cnt Uncert	Tot uncert	u/ga	Units	
35712	9J5K4210			J7H2403318	BGS-A1-02S	SOIL	8/23/2007 10:00:00	8/15/2007 9:45:00 AM		
RA-226DA	AXTA	0		9/20/2007 6:30:17 AM	1.225E+00	7.963E-02	7.963E-02	3.73E-02	PCI/GRAM	3.545E+2
RA-228DA	AXTA	0		9/20/2007 6:30:17 AM	1.4092E+00	1.184E-01	1.184E-01	7.586E-02	PCI/GRAM	3.545E+2
35712	9J5K4410			J7H2403319	BGS-A1-02D	SOIL	8/23/2007 10:00:00	8/15/2007 9:45:00 AM		
RA-226DA	AXTA	0		9/20/2007 8:32:25 AM	1.2758E+00	8.035E-02	8.035E-02	3.075E-02	PCI/GRAM	3.41E+2
RA-228DA	AXTA	0		9/20/2007 8:32:25 AM	1.4957E+00	1.156E-01	1.156E-01	6.171E-02	PCI/GRAM	3.41E+2
35712	9J5K4610			J7H24033110	BGS-A1-06S	SOIL	8/23/2007 10:00:00	8/15/2007 10:45:00 AM		
RA-226DA	AXTA	0		9/20/2007 4:00:37 PM	8.7094E-01	5.975E-02	5.975E-02	3.7E-02	PCI/GRAM	3.515E+2
RA-228DA	AXTA	0		9/20/2007 4:00:37 PM	9.5999E-01	8.065E-02	8.065E-02	7.444E-02	PCI/GRAM	3.515E+2
35712	9J5K4G10			J7H2403311	BGS-A2-51S	SOIL	8/23/2007 10:00:00	8/14/2007 3:00:00 PM		
RA-226DA	AXTA	0		9/20/2007 5:26:09 AM	9.8599E-01	6.518E-02	6.518E-02	3.619E-02	PCI/GRAM	3.533E+2
RA-228DA	AXTA	0		9/20/2007 5:26:09 AM	8.4435E-01	7.552E-02	7.552E-02	7.184E-02	PCI/GRAM	3.533E+2
35712	9J5K4J10			J7H2403312	BGS-A2-51D-1	SOIL	8/23/2007 10:00:00	8/14/2007 3:00:00 PM		
RA-226DA	AXTA	0		9/20/2007 5:26:37 AM	9.8155E-01	6.585E-02	6.585E-02	4.079E-02	PCI/GRAM	3.438E+2
RA-228DA	AXTA	0		9/20/2007 5:26:37 AM	8.7399E-01	7.722E-02	7.722E-02	8.6E-02	PCI/GRAM	3.438E+2
35712	9J5K4K10			J7H2403313	BGS-A2-51D-2	SOIL	8/23/2007 10:00:00	8/14/2007 3:00:00 PM		
RA-226DA	AXTA	0		9/20/2007 5:26:57 AM	8.7577E-01	6.054E-02	6.054E-02	3.593E-02	PCI/GRAM	3.59E+2
RA-228DA	AXTA	0		9/20/2007 5:26:57 AM	8.9011E-01	7.145E-02	7.145E-02	6.818E-02	PCI/GRAM	3.59E+2
35712	9J5K4M10			J7H2403314	BGS-A1-14S	SOIL	8/23/2007 10:00:00	8/15/2007 7:30:00 AM		
RA-226DA	AXTA	0		9/20/2007 5:27:11 AM	1.1003E+00	7.696E-02	7.696E-02	4.238E-02	PCI/GRAM	3.4E+2
RA-228DA	AXTA	0		9/20/2007 5:27:11 AM	1.0022E+00	9.035E-02	9.035E-02	8.219E-02	PCI/GRAM	3.4E+2
35712	9J5K4N10			J7H2403315	BGS-A1-14D	SOIL	8/23/2007 10:00:00	8/15/2007 7:30:00 AM		
RA-226DA	AXTA	0		9/20/2007 5:27:30 AM	1.4805E+00	9.363E-02	9.363E-02	3.834E-02	PCI/GRAM	3.244E+2
RA-228DA	AXTA	0		9/20/2007 5:27:30 AM	1.4078E+00	1.126E-01	1.126E-01	6.922E-02	PCI/GRAM	3.244E+2
35712	9J5K4V10			J7H2403316	BGS-A1-05S	SOIL	8/23/2007 10:00:00	8/15/2007 8:30:00 AM		
RA-226DA	AXTA	0		9/20/2007 5:27:41 AM	9.2946E-01	6.227E-02	6.227E-02	3.018E-02	PCI/GRAM	3.496E+2
RA-226DA	TBD	0		9/20/2007 5:27:41 AM	9.2946E-01	6.227E-02	6.227E-02	3.018E-02	PCI/GRAM	3.496E+2
RA-228DA	AXTA	0		9/20/2007 5:27:41 AM	9.6287E-01	9.104E-02	9.104E-02	5.784E-02	PCI/GRAM	3.496E+2
RA-228DA	TBD	0		9/20/2007 5:27:41 AM	9.6286E-01	9.104E-02	9.104E-02	5.784E-02	PCI/GRAM	3.496E+2
35712	9J5K4X10			J7H2403317	BGS-A1-05D	SOIL	8/23/2007 10:00:00	8/15/2007 8:30:00 AM		
RA-226DA	AXTA	0		9/20/2007 5:27:57 AM	8.3126E-01	5.925E-02	5.925E-02	4.422E-02	PCI/GRAM	3.602E+2
RA-228DA	AXTA	0		9/20/2007 5:27:57 AM	9.407E-01	8.574E-02	8.574E-02	9.047E-02	PCI/GRAM	3.602E+2
35712	9J5K5910			J7H24033114	BGS-A2-54S	SOIL	8/23/2007 10:00:00	8/15/2007 11:15:00 PM		
RA-226DA	AXTA	0		9/20/2007 4:36:56 PM	1.1318E+00	7.387E-02	7.387E-02	3.518E-02	PCI/GRAM	3.734E+2
RA-228DA	AXTA	0		9/20/2007 4:36:56 PM	1.5122E+00	1.289E-01	1.289E-01	6.947E-02	PCI/GRAM	3.734E+2
35712	9J5K5A10			J7H24033111	BGS-A1-06D	SOIL	8/23/2007 10:00:00	8/15/2007 10:45:00 AM		
RA-226DA	AXTA	0		9/20/2007 4:01:25 PM	9.014E-01	5.931E-02	5.931E-02	3.497E-02	PCI/GRAM	3.261E+2
RA-228DA	AXTA	0		9/20/2007 4:01:25 PM	1.0082E+00	8.457E-02	8.457E-02	6.564E-02	PCI/GRAM	3.261E+2
35712	9J5K5K10			J7H24033112	BGS-A2-53S	SOIL	8/23/2007 10:00:00	8/15/2007 12:30:00 PM		
RA-226DA	AXTA	0		9/20/2007 4:02:05 PM	1.8994E+00	1.194E-01	1.194E-01	3.35E-02	PCI/GRAM	3.554E+2
RA-228DA	AXTA	0		9/20/2007 4:02:05 PM	1.7311E+00	1.537E-01	1.537E-01	6.203E-02	PCI/GRAM	3.554E+2
35712	9J5K5M10			J7H24033113	BGS-A2-53D	SOIL	8/23/2007 10:00:00	8/15/2007 12:30:00 PM		
RA-226DA	AXTA	0		9/20/2007 4:02:41 PM	2.4252E+00	1.546E-01	1.546E-01	5.467E-02	PCI/GRAM	3.382E+2
RA-228DA	AXTA	0		9/20/2007 4:02:41 PM	1.7293E+00	1.332E-01	1.332E-01	1.094E-01	PCI/GRAM	3.382E+2
35712	9J5K6C10			J7H24033115	BGS-A2-54D	SOIL	8/23/2007 10:00:00	8/15/2007 11:15:00 PM		
RA-226DA	AXTA	0		9/20/2007 6:37:33 PM	1.381E+00	8.761E-02	8.761E-02	2.967E-02	PCI/GRAM	3.606E+2
RA-228DA	AXTA	0		9/20/2007 6:37:33 PM	1.6842E+00	1.298E-01	1.298E-01	5.622E-02	PCI/GRAM	3.606E+2
35712	J5K4G1CR			J7H2403311	BGS-A2-51S DUP	SOIL	8/23/2007 10:00:00	8/14/2007 3:00:00 PM		
RA-226DA	AXTA	0	R	9/20/2007 3:59:39 PM	9.2349E-01	6.124E-02	6.124E-02	4.26E-02	PCI/GRAM	3.533E+2
RA-228DA	AXTA	0	R	9/20/2007 3:59:39 PM	8.794E-01	7.792E-02	7.792E-02	8.419E-02	PCI/GRAM	3.533E+2
35712	J5WEW1AB			J7H290000628	INTRA-LAB BLANK	SOIL	8/23/2007 10:00:00	8/14/2007 3:00:00 PM		

7241628,7241628, *** NOT IN QUANTIMS, J5K4V1AA-D, DATA NOT LOADED *** **Samples Inserted | Updated | NotUpdated => 18 | 0 | 0,
 **Results Inserted | ReTestInserted | Updated | NotInserted => 35 | 0 | 0 | 2.
 **Diff RptDb | Qtims => .

SDG or Batch	Rpt Db Id	LotSample	Client Id	Matrix	Received Date	Sample Date	Isotope	Method	RT	St	Cc	Analysis Date	Result	Cnt	Uncert	Tot	Uncert	µg/g	Units	Expected Yield	Volumes
RA-226DA	AXTA	0	B	9/20/2007 5:35:06 AM	-4.1887E-02	2.56E-02	2.56E-02	6.156E-02	PCI/GRAM												2.001E+2
RA-228DA	AXTA	0	B	9/20/2007 5:35:06 AM	-7.8827E-02	4.11E-02	4.11E-02	1.054E-01	PCI/GRAM												2.001E+2
35712	J5WEW1CS	J7H290000628	INTRA-LAB CHECK		SOIL	8/23/2007 10:00:00	8/14/2007 3:00:00 PM														
CS-137DA	AXTA	0	S	9/20/2007 4:03:48 PM	1.1729E+00	7.431E-02	7.431E-02	2.375E-02	PCI/GRAM												2.011E+2

7241628,7241628, *** NOT IN QUANTIMS, J5K4V1AA-D, DATA NOT LOADED *** **Samples Inserted | Updated | NotUpdated => 18 | 0 | 0.
 **Results Inserted | ReTestInserted | Updated | NotInserted => 35 | 0 | 0 | 2.
 **Diff RptDb | Qtims => .

GAMMA
STANDARDS AND TRACEABILITY

9/27/2007 9:31:51 AM

Standard Material Fractions (Vials)

Vial Prep: 9/26/06 to 9/28/07, SMFractionIdentifier Between GSE1138 and GSE1138, Order by SMIdentifier, Constituent Code, SMFractionIdentifier

Vial Identifier	Constituent	Prep Activity/Concentration	Std Wt Used	Prep,Decayed To Date	Prep By	Std Decayed Activity/Concentration
Parent Standard: CS13703A170		Ref: 6/8/2005	2.5172E+03 ± 5.982E+03	DPM/G		
GSE1138	CS-137	4.5899E+02 ± 1.091E+03 DPM	0.1919 g	8/29/2007 8/29/2007	Armstrong	2.3918E+03 ± 5.684E+03 DPM/G
		4.5899E+002 ± 4.590E+002 (1)	4.5899E+002 , 4.5899E+002			

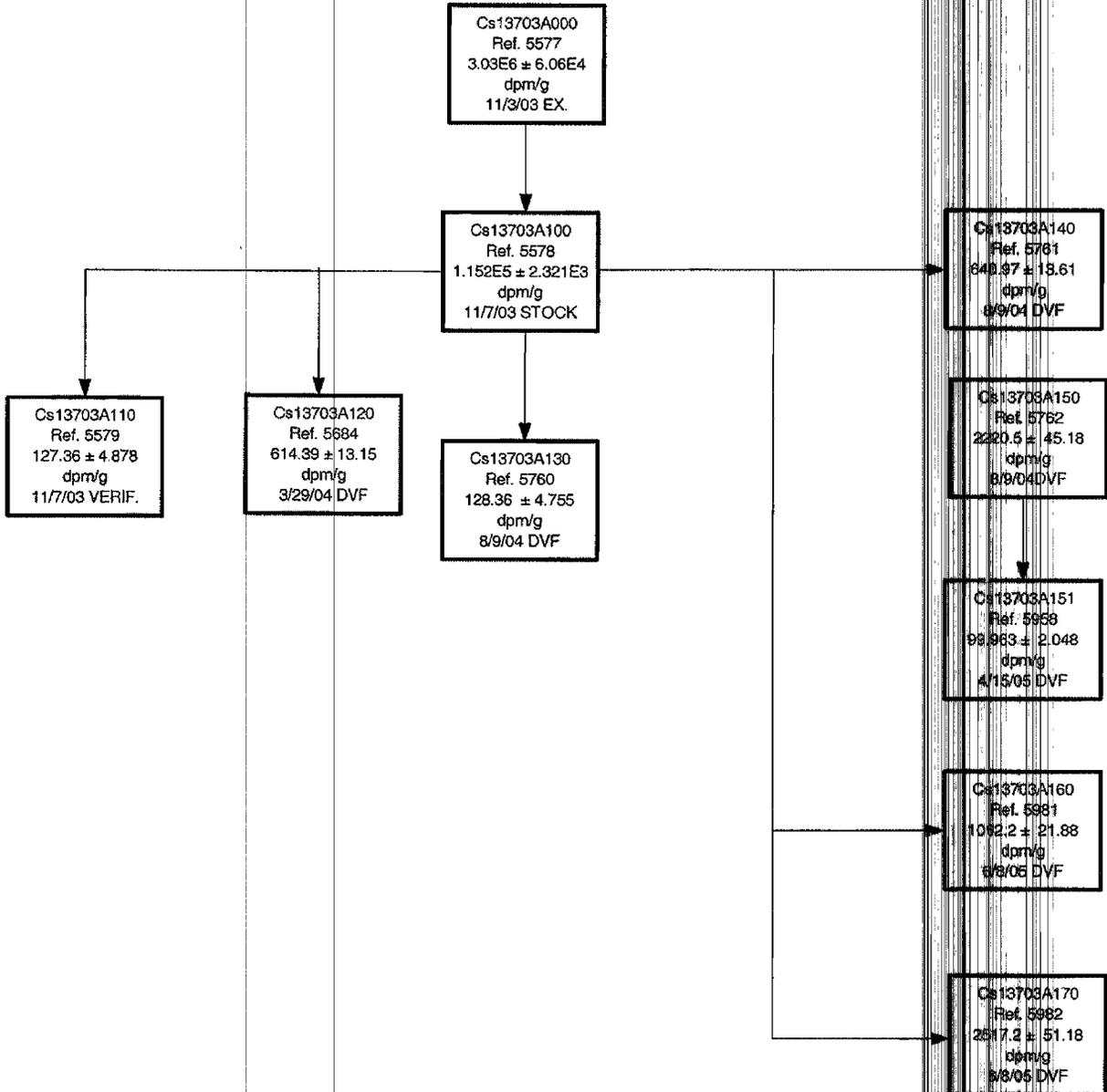
9/27/2007 9:31:51 AM

Standard Material Fractions (Vials)

Vial Prep: 9/26/06 to 9/28/07, SMFractionIdentifier Between GSE1138 and GSE1138, Order by SMIdentifier, ConstituentCode, SMFractionIdentifier

Vial Identifier	Constituent	Prep Activity/Concentration	Std Wt Used	Prep,Decayed To Date	Prep by	Std Decayed Activity/Concentration
Parent Standard: CS13703A170		Ref: 6/8/2005	2.5172E+03	± 5.982E+03	DPM/G	
GSE1138	CS-137	4.5899E+02 ± 1.091E+03 DPM	0.1919 g	8/29/2007 8/29/2007	Armstrong	2.3918E+03 ± 5.684E+03 DPM/G
		4.5899E+002 ± 4.590E+002 (1)	4.5899E+002 , 4.5899E+002			

Cs13703A000



ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>6/8/2005</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>		<u>5578</u>
4) Source Activity (dpm ± dpm/g)	<u>1.1107E+05</u>	±	<u>2.238E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>1.3034</u>		
7) (% Error) of Weight of Source Material used	<u>0.3683</u>	%	
8) Diluent	<u>2M HNO3-P0500352</u>		
9) Total Weight of the Dilution (g)	<u>136.29</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2201</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.0622E+03</u>	±	<u>2.188E+01</u>
12) Total Uncertainty	<u>2.060</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A160</u>		<u>5981</u>
14) Calibration Reference Date	<u>6/8/2005</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>6/8/2005</u>
16) Reviewed by/date	<u>SEW</u>		<u>6/9/2005</u>
17) Location <u>QCLAB/STWT1165</u>		18) Exhausted	

CALCULATIONS

7) % Error of Wt. used = $(0.0048 / \text{Weight of Source Material used} * 100)$

10) % error of Dilution Wt. = $(0.3 / \text{Total Weight of Dilution} * 100)$

11) Specific Activity = $\text{Source Activity} * \text{Wt. of Source Material used} / \text{Total Wt. of the Dilution}$

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>6/8/2005</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>		<u>5578</u>
4) Source Activity (dpm ± dpm/g)	<u>1.1107E+05</u>	±	<u>2.288E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>3.0806</u>		
7) (% Error) of Weight of Source Material used	<u>0.1558</u>	%	
8) Diluent	<u>2M HNO3-P0500352</u>		
9) Total Weight of the Dilution (g)	<u>135.93</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2207</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>2.5172E+03</u>	±	<u>5.118E+01</u>
12) Total Uncertainty	<u>2.033</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A170</u>		<u>5982</u>
14) Calibration Reference Date	<u>6/8/2005</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>6/8/2005</u>
16) Reviewed by/date	<u>sew</u>		<u>6/9/2005</u>
17) Location <u>QCLAB/STWT1166</u>		18) Exhausted	

CALCULATIONS

- 7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)
- 10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)
- 11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution
- 12) % Total Uncertainty = $(\% \text{ error of Source Activity}^2 + \% \text{ error of Wt. Used}^2 + \% \text{ error of Dilution Wt.}^2)$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>8/9/2004</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1321E+05</u>	±	<u>2.281E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.7589</u>		
7) (% Error) of Weight of Source Material used	<u>0.6325</u>	%	
8) Diluent	<u>2M HNO3-P0400528</u>		
9) Total Weight of the Dilution (g)	<u>134.04</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2238</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>6.4097E+02</u>	±	<u>1.361E+01</u>
12) Total Uncertainty	<u>2.124</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A140</u>	<u>5761</u>	
14) Calibration Reference Date	<u>8/9/2004</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>8/9/2004</u>
16) Reviewed by/date	<u>SEW</u>		<u>8/11/2004</u>
17) Location	<u>QCLAB/STWT1028</u>	18) Exhausted	<u></u>

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $(\% \text{ error of Source Activity } ^2 + \% \text{ error of Wt. Used } ^2 + \% \text{ error of Dilution Wt } ^2)$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>8/9/2004</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>	<u>5578</u>	
4) Source Activity (dpm ± dpm/g)	<u>1.1321E+05</u>	±	<u>2.281E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.1548</u>		
7) (% Error) of Weight of Source Material used	<u>3.1008</u>	%	
8) Diluent	<u>2M HNO3-P0400528</u>		
9) Total Weight of the Dilution (g)	<u>136.53</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2197</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.2836E+02</u>	±	<u>4.755E+00</u>
12) Total Uncertainty	<u>3.704</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A130</u>	<u>5760</u>	
14) Calibration Reference Date	<u>8/9/2004</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>8/9/2004</u>
16) Reviewed by/date	<u>SEW</u>		<u>8/11/2004</u>
17) Location <u>QCLAB/STWT1027</u>	18) Exhausted		

CALCULATIONS

- 7) % Error of Wt. used = $(0.0048 / \text{Weight of Source Material used} * 100)$
- 10) % error of Dilution Wt. = $(0.3 / \text{Total Weight of Dilution} * 100)$
- 11) Specific Activity = $\text{Source Activity} * \text{Wt. of Source Material used} / \text{Total Wt. of the Dilution}$
- 12) % Total Uncertainty = $(\% \text{ error of Source Activity}^2 + \% \text{ error of Wt. Used}^2 + \% \text{ error of Dilution Wt.}^2)^{1/2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>3/29/2004</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>		<u>5578</u>
4) Source Activity (dpm ± dpm/g)	<u>1.1416E+05</u>	±	<u>2.300E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.7012</u>		
7) (% Error) of Weight of Source Material used	<u>0.6845</u>	%	
8) Diluent	<u>2M HNO3-P0400085</u>		
9) Total Weight of the Dilution (g)	<u>130.29</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2303</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>6.1439E+02</u>	±	<u>1.315E+01</u>
12) Total Uncertainty	<u>2.141</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A120</u>		<u>5684</u>
14) Calibration Reference Date	<u>3/29/2004</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>3/29/2004</u>
16) Reviewed by/date	<u>SEW</u>		<u>4/1/2004</u>
17) Location <u>QCLAB/STWT0946</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>11/7/2003</u>
3) Source Identification Number / Ref. Number	<u>CS13703A100</u>		<u>5578</u>
4) Source Activity (dpm ± dpm/g)	<u>1.1519E+05</u>	±	<u>2.821E+03</u>
5) Percent error of Source Activity	<u>2.015</u>	%	
6) Weight of Source Material used (g)	<u>0.1477</u>		
7) (% Error) of Weight of Source Material used	<u>3.2498</u>	%	
8) Diluent	<u>2M HNO3-P0200629</u>		
9) Total Weight of the Dilution (g)	<u>133.59</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2246</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.2736E+02</u>	±	<u>4.878E+00</u>
12) Total Uncertainty	<u>3.830</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A110</u>		<u>5579</u>
14) Calibration Reference Date	<u>11/7/2003</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>11/7/2003</u>
16) Reviewed by/date	<u>SEW</u>		<u>11/13/2003</u>
17) Location <u>QCLAB/STWT0872</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = $(0.0048 / \text{Weight of Source Material used} * 100)$

10) % error of Dilution Wt. = $(0.3 / \text{Total Weight of Dilution} * 100)$

11) Specific Activity = $\text{Source Activity} * \text{Wt. of Source Material used} / \text{Total Wt. of the Dilution}$

12) % Total Uncertainty = $(\% \text{ error of Source Activity}^2 + \% \text{ error of Wt. Used}^2 + \% \text{ error of Dilution Wt.}^2)$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE DILUTION RECORD

1) Prepared by	<u>W.G</u>	2) Date Prepared	<u>11/7/2003</u>
3) Source Identification Number / Ref. Number	<u>CS13703A000</u>		<u>5577</u>
4) Source Activity (dpm ± dpm/g)	<u>3.0310E+06</u>	±	<u>6.062E+04</u>
5) Percent error of Source Activity	<u>2</u>	%	
6) Weight of Source Material used (g)	<u>5.0442</u>		
7) (% Error) of Weight of Source Material used	<u>0.0952</u>	%	
8) Diluent	<u>2M HNO3-P0200629</u>		
9) Total Weight of the Dilution (g)	<u>132.73</u>		
10) (% Error) of Total Weight of the Dilution	<u>0.2260</u>	%	
11) Specific Activity of Diluted Solution dpm/g	<u>1.1519E+05</u>	±	<u>2.321E+03</u>
12) Total Uncertainty	<u>2.015</u>	%	
13) Dilution Identification Number / Ref. Number	<u>CS13703A100</u>		<u>5578</u>
14) Calibration Reference Date	<u>11/7/2003</u>		
15) Isotope Inventory File update by/date	<u>W.G</u>		<u>11/7/2003</u>
16) Reviewed by/date	<u>SEW</u>		<u>11/18/2003</u>
17) Location <u>QCLAB/STWT0871</u>	18) Exhausted		

CALCULATIONS

7) % Error of Wt. used = (0.0048 / Weight of Source Material used * 100)

10) % error of Dilution Wt. = (0.3 / Total Weight of Dilution * 100)

11) Specific Activity = Source Activity * Wt. of Source Material used / Total Wt. of the Dilution

12) % Total Uncertainty = $\sqrt{(\% \text{ error of Source Activity})^2 + (\% \text{ error of Wt. Used})^2 + (\% \text{ error of Dilution Wt.})^2}$

Form: CC-006, 7/15/99, Rev 3

ISOTOPE RECORD FORM

1) Isotope Cs-137 2) Reference Number 5577

3) Half Life 30.17 yrs. 4) Storage Location Std. Lab (D-9)

5) Source Identification Number Cs13703A000

CALIBRATION DATA

6) Activity as Received Units 2.571E5 dps

7) Overall Uncertainty Percent 2.0%

8) Reference Date / Time 11-3-03 12:00 EST (9:00AM)

9) Activity dpm/g 3.0318E+6 ± 6.0635 E+4

10) Volume or Mass (ml/g) 5.08815g

11) Calibrated by ANALYTICS

12) Certificate Solution Number 67125-310

SURVEY DATA

13) Date Received 11/6/2003

14) Surveyed by W.G

15) Survey Reading (Beta/Gamma) cpm <10,000K

16) Survey Reading (Alpha) cpm <BKG

17) Activity Conversion 2.571E+6dpsx60s/m/5.08815g=3.03E+06 ± 6.06E+4 dpm/g

18) Remarks Used all to make first dilution 11/7/03 w.g

19) Isotope File Updated by W.G 11/7/03

20) QC Approved SEW 11/13/03

ANALYTICS



Rec'd 11/03
55

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

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

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

67125-310

Cs-137 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated in an ionization chamber that was calibrated by the National Physical Laboratory, Teddington, U.K., and is directly traceable to national standards.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Cs-137
ACTIVITY (dps):	2.571 E5
HALF-LIFE:	3.007E1 years
CALIBRATION DATE:	November 3, 2003 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	2.0%

Impurities: γ -impurities <0.1%

5.08815 grams 0.1M HCl solution with 30 μ g/g Cs carrier.

Master Solution ID: P271V90

P O NUMBER: 1992574-0000P, Item 2

SOURCE PREPARED BY: M. Taskeava
M. Taskeava, Radiochemist

Q A APPROVED: MM. mfg 11-5-03

GAMMA

CONTINUING CALIBRATION

Quality Assurance Report.

Generated 25-SEP-2007 13:50:43.54

QA Filename : RDND06::RDND06\$DKA100:[GER5.QA]CHECK.QAF6

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.004930 Upper Bound : 0.005230

Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 7 M Slope Samples: 7

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.005084 Std Deviation : 0.000051

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:46	chk		0.0052	In				
3-SEP-2007 07:05	chk		0.0050					
4-SEP-2007 05:16	chk		0.0050					
4-SEP-2007 05:27	chk		0.0050					
5-SEP-2007 05:17	chk		0.0050					
6-SEP-2007 06:17	chk		0.0051					
7-SEP-2007 06:17	chk		0.0052	In				
7-SEP-2007 06:34	chk		0.0051					
8-SEP-2007 08:04	chk		0.0051					
10-SEP-2007 04:59	chk		0.0052					
11-SEP-2007 04:41	chk		0.0050	In				
12-SEP-2007 04:55	chk		0.0052					
13-SEP-2007 04:48	chk		0.0051					
14-SEP-2007 04:59	chk		0.0050					
15-SEP-2007 07:57	chk		0.0051					
17-SEP-2007 04:48	chk		0.0051					
18-SEP-2007 05:08	chk		0.0051					
19-SEP-2007 05:21	chk		0.0050					

20-SEP-2007 04:53	chk ✓	0.0051			
21-SEP-2007 04:51	chk	0.0051			
22-SEP-2007 08:47	chk	0.0052			
24-SEP-2007 04:49	chk	0.0051			

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 389.500000 Upper Bound : 590.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:46	chk		489.9255			
3-SEP-2007 07:05	chk		489.8599			

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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4-SEP-2007 05:16	chk		489.9237			
4-SEP-2007 05:27	chk		489.9344			
5-SEP-2007 05:17	chk		489.9388			
6-SEP-2007 06:17	chk		489.9300			
7-SEP-2007 06:17	chk		489.9129			
7-SEP-2007 06:34	chk		489.8969			
8-SEP-2007 08:04	chk		489.8866			
10-SEP-2007 04:59	chk		489.8204			
11-SEP-2007 04:41	chk		489.8793			
12-SEP-2007 04:55	chk		489.8342			
13-SEP-2007 04:48	chk		489.8978			
14-SEP-2007 04:59	chk		489.8949			
15-SEP-2007 07:57	chk		489.8589			
17-SEP-2007 04:48	chk		489.9236			
18-SEP-2007 05:08	chk		489.9181			
19-SEP-2007 05:21	chk		489.8461			
20-SEP-2007 04:53	chk ✓		489.8359			
21-SEP-2007 04:51	chk		489.8556			
22-SEP-2007 08:47	chk		489.8732			
24-SEP-2007 04:49	chk		489.8065			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.945850 Std Deviation : 0.015596

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:46	chk		0.9187					
3-SEP-2007 07:05	chk		0.9360					
4-SEP-2007 05:16	chk		0.8812	Ac				
4-SEP-2007 05:27	chk		0.9304					
5-SEP-2007 05:17	chk		0.9288					
6-SEP-2007 06:17	chk		0.9615					
7-SEP-2007 06:17	chk		0.9109	In				
7-SEP-2007 06:34	chk		0.9283					
8-SEP-2007 08:04	chk		0.9462					
10-SEP-2007 04:59	chk		0.9303					
11-SEP-2007 04:41	chk		0.9024	In				
12-SEP-2007 04:55	chk		0.9118	In				
13-SEP-2007 04:48	chk		0.9405					
14-SEP-2007 04:59	chk		0.9081	In				
15-SEP-2007 07:57	chk		0.9100	In				
17-SEP-2007 04:48	chk		0.9537					
18-SEP-2007 05:08	chk		0.9391					
19-SEP-2007 05:21	chk		0.9417					
20-SEP-2007 04:53	chk ✓		0.9502					
21-SEP-2007 04:51	chk		0.9285					
22-SEP-2007 08:47	chk		0.9398					

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
24-SEP-2007 04:49	chk		0.9522					

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000681 Upper Bound : 0.000781

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.000731 Std Deviation : 0.000017

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
1-SEP-2007 08:46	chk		0.0008					
3-SEP-2007 07:05	chk		0.0007					
4-SEP-2007 05:16	chk		0.0007					
4-SEP-2007 05:27	chk		0.0007					
5-SEP-2007 05:17	chk		0.0007					
6-SEP-2007 06:17	chk		0.0007					
7-SEP-2007 06:17	chk		0.0008	Ab	Ac			
7-SEP-2007 06:34	chk		0.0007					
8-SEP-2007 08:04	chk		0.0007					
10-SEP-2007 04:59	chk		0.0007					
11-SEP-2007 04:41	chk		0.0007					
12-SEP-2007 04:55	chk		0.0007					
13-SEP-2007 04:48	chk		0.0007					
14-SEP-2007 04:59	chk		0.0007					
15-SEP-2007 07:57	chk		0.0007					
17-SEP-2007 04:48	chk		0.0007					
18-SEP-2007 05:08	chk		0.0007					
19-SEP-2007 05:21	chk		0.0007					
20-SEP-2007 04:53	chk		0.0007					
21-SEP-2007 04:51	chk		0.0007					
22-SEP-2007 08:47	chk		0.0007					
24-SEP-2007 04:49	chk		0.0007					

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5544.399902 Upper Bound : 5744.399902

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
1-SEP-2007 08:46	chk		5649.1025			
3-SEP-2007 07:05	chk		5648.6001			
4-SEP-2007 05:16	chk		5648.5938			
4-SEP-2007 05:27	chk		5648.6875			

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
5-SEP-2007 05:17	chk		5648.8101			
6-SEP-2007 06:17	chk		5648.7085			
7-SEP-2007 06:17	chk		5648.7295			
7-SEP-2007 06:34	chk		5648.8101			
8-SEP-2007 08:04	chk		5648.7271			
10-SEP-2007 04:59	chk		5648.7222			
11-SEP-2007 04:41	chk		5648.2949			
12-SEP-2007 04:55	chk		5648.6724			
13-SEP-2007 04:48	chk		5648.4272			
14-SEP-2007 04:59	chk		5648.6357			
15-SEP-2007 07:57	chk		5648.7832			
17-SEP-2007 04:48	chk		5648.5854			
18-SEP-2007 05:08	chk		5648.5137			
19-SEP-2007 05:21	chk		5648.4888			
20-SEP-2007 04:53	chk		5648.4878			
21-SEP-2007 04:51	chk		5648.5132			
22-SEP-2007 08:47	chk		5648.4292			
24-SEP-2007 04:49	chk		5648.3613			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.887466 Std Deviation : 0.118246

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
1-SEP-2007 08:46	chk		1.7574			

3-SEP-2007 07:05	chk	1.6296	In
4-SEP-2007 05:16	chk	1.9994	
4-SEP-2007 05:27	chk	1.9648	
5-SEP-2007 05:17	chk	1.7854	
6-SEP-2007 06:17	chk	1.6777	
7-SEP-2007 06:17	chk	1.8605	
7-SEP-2007 06:34	chk	1.9640	
8-SEP-2007 08:04	chk	1.9200	
10-SEP-2007 04:59	chk	1.7442	
11-SEP-2007 04:41	chk	1.7503	
12-SEP-2007 04:55	chk	1.7044	
13-SEP-2007 04:48	chk	1.6525	
14-SEP-2007 04:59	chk	1.8161	
15-SEP-2007 07:57	chk	1.6751	
17-SEP-2007 04:48	chk	1.9985	
18-SEP-2007 05:08	chk	1.8432	
19-SEP-2007 05:21	chk	1.7807	
20-SEP-2007 04:53	chk	1.7049	
21-SEP-2007 04:51	chk	1.9216	
22-SEP-2007 08:47	chk	1.6457	In
24-SEP-2007 04:49	chk	1.7134	

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001110 Upper Bound : 0.001330

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.001220 Std Deviation : 0.000036

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:46	chk		0.0012		
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3-SEP-2007 07:05	chk	0.0012			
4-SEP-2007 05:16	chk	0.0012			
4-SEP-2007 05:27	chk	0.0012			
5-SEP-2007 05:17	chk	0.0012			
6-SEP-2007 06:17	chk	0.0012			
7-SEP-2007 06:17	chk	0.0012			
7-SEP-2007 06:34	chk	0.0013			
8-SEP-2007 08:04	chk	0.0012			
10-SEP-2007 04:59	chk	0.0011		In	
11-SEP-2007 04:41	chk	0.0013			
12-SEP-2007 04:55	chk	0.0012			
13-SEP-2007 04:48	chk	0.0013			
14-SEP-2007 04:59	chk	0.0013			
15-SEP-2007 07:57	chk	0.0011		In	
17-SEP-2007 04:48	chk	0.0012			
18-SEP-2007 05:08	chk	0.0012			
19-SEP-2007 05:21	chk	0.0013		In	
20-SEP-2007 04:53	chk	0.0012			
21-SEP-2007 04:51	chk	0.0013			
22-SEP-2007 08:47	chk	0.0012			
24-SEP-2007 04:49	chk	0.0012			

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3023.000000 Upper Bound : 3223.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	B3	Rej
1-SEP-2007 08:46	chk	3125.6570						
3-SEP-2007 07:05	chk	3125.6929						
4-SEP-2007 05:16	chk	3125.3594						
4-SEP-2007 05:27	chk	3125.3789						
5-SEP-2007 05:17	chk	3125.6946						
6-SEP-2007 06:17	chk	3125.6045						
7-SEP-2007 06:17	chk	3125.5149						
7-SEP-2007 06:34	chk	3125.5103						
8-SEP-2007 08:04	chk	3125.7214						
10-SEP-2007 04:59	chk	3125.6768						
11-SEP-2007 04:41	chk	3125.6643						

12-SEP-2007 04:55	chk	3125.7659			
13-SEP-2007 04:48	chk	3125.5688			
14-SEP-2007 04:59	chk	3125.6372			
15-SEP-2007 07:57	chk	3125.8279			
17-SEP-2007 04:48	chk	3125.6042			
18-SEP-2007 05:08	chk	3125.4316			
19-SEP-2007 05:21	chk	3125.3374			
20-SEP-2007 04:53	chk	3125.5906			
21-SEP-2007 04:51	chk	3125.4976			
22-SEP-2007 08:47	chk	3125.6121			
24-SEP-2007 04:49	chk	3125.5930			

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.469521 Std Deviation : 0.081560

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:46	chk	1.3075			
3-SEP-2007 07:05	chk	1.4589			
4-SEP-2007 05:16	chk	1.4739			
4-SEP-2007 05:27	chk	1.4422			
5-SEP-2007 05:17	chk	1.6186			
6-SEP-2007 06:17	chk	1.3906			
7-SEP-2007 06:17	chk	1.4145			
7-SEP-2007 06:34	chk	1.4646			
8-SEP-2007 08:04	chk	1.4263			
10-SEP-2007 04:59	chk	1.4918			
11-SEP-2007 04:41	chk	1.4611			
12-SEP-2007 04:55	chk	1.5731			
13-SEP-2007 04:48	chk	1.5090			
14-SEP-2007 04:59	chk	1.4664			

15-SEP-2007 07:57	chk	1.3980	
17-SEP-2007 04:48	chk	1.4593	
18-SEP-2007 05:08	chk	1.4097	
19-SEP-2007 05:21	chk	1.2881	In
20-SEP-2007 04:53	chk	1.4329	
21-SEP-2007 04:51	chk	1.4223	
22-SEP-2007 08:47	chk	1.3887	
24-SEP-2007 04:49	chk	1.5276	

Quality Assurance Report.

Generated 25-SEP-2007 13:50:51.58

QA Filename : RDND06::RDND06\$DKA100:[GER5.QA]BKG.QAF;1

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.093447 Std Deviation : 0.006895

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:28	BKG		0.1064	
9-SEP-2007 06:54	BKG		0.1123	In
16-SEP-2007 07:30	BKG		0.1028	
23-SEP-2007 07:57	BKG		0.1081	In

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.089402 Std Deviation : 0.002846

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0949		
9-SEP-2007 06:54	BKG		0.0959	In	
16-SEP-2007 07:30	BKG		0.0899		
23-SEP-2007 07:57	BKG		0.0914		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.038932 Std Deviation : 0.001917

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0400		
9-SEP-2007 06:54	BKG		0.0375		
16-SEP-2007 07:30	BKG		0.0365		
23-SEP-2007 07:57	BKG		0.0402		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.045529 Std Deviation : 0.001757

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0442		

9-SEP-2007 06:54 BKG 0.0477 | | |
 16-SEP-2007 07:30 BKG 0.0471 | | |
 23-SEP-2007 07:57 BKG 0.0463 | | |

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.062721 Std Deviation : 0.002375

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:28	BKG		0.0643	
9-SEP-2007 06:54	BKG		0.0681	In
16-SEP-2007 07:30	BKG		0.0641	
23-SEP-2007 07:57	BKG		0.0652	

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.069156 Std Deviation : 0.001803

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:28	BKG		0.0694	
9-SEP-2007 06:54	BKG		0.0727	
16-SEP-2007 07:30	BKG		0.0694	
23-SEP-2007 07:57	BKG		0.0710	

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.061022 Std Deviation : 0.002350

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:28	BKG		0.0619			

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
9-SEP-2007 06:54	BKG		0.0628			
16-SEP-2007 07:30	BKG		0.0619			
23-SEP-2007 07:57	BKG		0.0625			

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.127906 Std Deviation : 0.004372

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:28	BKG		0.1356			
9-SEP-2007 06:54	BKG		0.1373	In		
16-SEP-2007 07:30	BKG		0.1295			
23-SEP-2007 07:57	BKG		0.1381	In		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM

Parameter Units : cpm Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.078132 Std Deviation : 0.004366

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0874	In	
9-SEP-2007 06:54	BKG		0.0878	In	
16-SEP-2007 07:30	BKG		0.0815		
23-SEP-2007 07:57	BKG		0.0876	In	

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00
 Mean : 0.063901 Std Deviation : 0.003079

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:28	BKG		0.0691		
9-SEP-2007 06:54	BKG		0.0672		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
16-SEP-2007 07:30	BKG		0.0678		
23-SEP-2007 07:57	BKG		0.0706	In	

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : cpm Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.115846 Std Deviation : 0.005027

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	BKG		0.1247					
9-SEP-2007 06:54	BKG		0.1253					
16-SEP-2007 07:30	BKG		0.1182					
23-SEP-2007 07:57	BKG		0.1284	In				

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2006 00:00 End Date : 1-JUL-2006 00:00

Mean : 0.747467 Std Deviation : 0.022446

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:28	BKG		0.8029	In				
9-SEP-2007 06:54	BKG		0.7963	In				
16-SEP-2007 07:30	BKG		0.7447					
23-SEP-2007 07:57	BKG		0.8023	In				

Quality Assurance Report.

Generated 25-SEP-2007 13:48:55.13

QA Filename : \$DISK1:[GER6.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.005600 Upper Bound : 0.006100

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.005903 Std Deviation : 0.000059

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		0.0059					
3-SEP-2007 07:05	chk		0.0060	In				
4-SEP-2007 05:16	chk		0.0059					
4-SEP-2007 05:28	chk		0.0058					
5-SEP-2007 05:34	chk		0.0058					
5-SEP-2007 05:46	chk		0.0058					
6-SEP-2007 06:16	chk		0.0060	In				
7-SEP-2007 06:16	chk		0.0058					
8-SEP-2007 08:03	chk		0.0059					
10-SEP-2007 04:59	chk		0.0060					
11-SEP-2007 04:41	chk		0.0059					
12-SEP-2007 04:56	chk		0.0059					
12-SEP-2007 05:09	chk		0.0060					
13-SEP-2007 04:48	chk		0.0059					
14-SEP-2007 04:49	chk		0.0058					
15-SEP-2007 07:57	chk		0.0059					
15-SEP-2007 08:12	chk		0.0059					
17-SEP-2007 04:48	chk		0.0060					
18-SEP-2007 05:15	chk		0.0059					
19-SEP-2007 05:21	chk		0.0059					
20-SEP-2007 04:53	chk		0.0058					

21-SEP-2007 04:51	chk	0.0059		
21-SEP-2007 05:05	chk	0.0059		
21-SEP-2007 05:30	chk	0.0059		
22-SEP-2007 08:47	chk	0.0059		
22-SEP-2007 08:59	chk	0.0059		
22-SEP-2007 09:11	chk	0.0060		
24-SEP-2007 04:49	chk	0.0059		

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 386.000000 Upper Bound : 586.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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1-SEP-2007 08:45	chk	488.1690		
3-SEP-2007 07:05	chk	488.0864		
4-SEP-2007 05:16	chk	488.2636		
4-SEP-2007 05:28	chk	488.2724		
5-SEP-2007 05:34	chk	488.2014		
5-SEP-2007 05:46	chk	488.1729		
6-SEP-2007 06:16	chk	488.0614		
7-SEP-2007 06:16	chk	488.0975		
8-SEP-2007 08:03	chk	488.0399		
10-SEP-2007 04:59	chk	487.9230		
11-SEP-2007 04:41	chk	487.9758		
12-SEP-2007 04:56	chk	488.0017		
12-SEP-2007 05:09	chk	488.0114		
13-SEP-2007 04:48	chk	488.0844		
14-SEP-2007 04:49	chk	488.0361		
15-SEP-2007 07:57	chk	488.0605		
15-SEP-2007 08:12	chk	488.0408		
17-SEP-2007 04:48	chk	488.0784		
18-SEP-2007 05:15	chk	488.0566		
19-SEP-2007 05:21	chk	488.0272		
20-SEP-2007 04:53	chk	488.0179		

21-SEP-2007 04:51	chk	488.0442			
21-SEP-2007 05:05	chk	488.0957			
21-SEP-2007 05:30	chk	488.0233			
22-SEP-2007 08:47	chk	487.9961			
22-SEP-2007 08:59	chk	487.9783			
22-SEP-2007 09:11	chk	487.9643			
24-SEP-2007 04:49	chk	488.0048			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.960000 Upper Bound : 1.080000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.021169 Std Deviation : 0.019690

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		1.0085					
3-SEP-2007 07:05	chk		1.0357					
4-SEP-2007 05:16	chk		1.0467					
4-SEP-2007 05:28	chk		1.0248					
5-SEP-2007 05:34	chk		1.0204					
5-SEP-2007 05:46	chk		1.0171					
6-SEP-2007 06:16	chk		1.0236					
7-SEP-2007 06:16	chk		1.0019					
8-SEP-2007 08:03	chk		0.9813	In				
10-SEP-2007 04:59	chk		1.0415					

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
11-SEP-2007 04:41	chk		1.0318					
12-SEP-2007 04:56	chk		1.0376					
12-SEP-2007 05:09	chk		1.0590					
13-SEP-2007 04:48	chk		1.0249					
14-SEP-2007 04:49	chk		1.0078					

15-SEP-2007 07:57	chk	1.0721	In
15-SEP-2007 08:12	chk	1.0376	
17-SEP-2007 04:48	chk	1.0381	
18-SEP-2007 05:15	chk	1.0355	
19-SEP-2007 05:21	chk	1.0416	
20-SEP-2007 04:53	chk	0.9902	
21-SEP-2007 04:51	chk	1.0175	
21-SEP-2007 05:05	chk	0.9985	
21-SEP-2007 05:30	chk	0.9963	
22-SEP-2007 08:47	chk	0.9744	In
22-SEP-2007 08:59	chk	0.9807	In
22-SEP-2007 09:11	chk	1.0309	
24-SEP-2007 04:49	chk	1.0032	

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000710 Upper Bound : 0.001100

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.000875 Std Deviation : 0.000056

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		0.0009		
3-SEP-2007 07:05	chk		0.0008		
4-SEP-2007 05:16	chk		0.0006	Be Ac	
4-SEP-2007 05:28	chk		0.0009		
5-SEP-2007 05:34	chk		0.0009		
5-SEP-2007 05:46	chk		0.0008		
6-SEP-2007 06:16	chk		0.0008		
7-SEP-2007 06:16	chk		0.0009		
8-SEP-2007 08:03	chk		0.0009		
10-SEP-2007 04:59	chk		0.0008	In	
11-SEP-2007 04:41	chk		0.0009		
12-SEP-2007 04:56	chk		0.0005	Be Ac	
12-SEP-2007 05:09	chk		0.0009		

13-SEP-2007 04:48	chk	0.0009	
14-SEP-2007 04:49	chk	0.0009	
15-SEP-2007 07:57	chk	0.0007	Be Ac
15-SEP-2007 08:12	chk	0.0009	
17-SEP-2007 04:48	chk	0.0009	
18-SEP-2007 05:15	chk	0.0009	
19-SEP-2007 05:21	chk	0.0009	

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
20-SEP-2007 04:53	chk	0.0009		
21-SEP-2007 04:51	chk	0.0009		
21-SEP-2007 05:05	chk	0.0005	Be Ac	
21-SEP-2007 05:30	chk	0.0007	Be Ac	
22-SEP-2007 08:47	chk	0.0009		
22-SEP-2007 08:59	chk	0.0009		
22-SEP-2007 09:11	chk	0.0009		
24-SEP-2007 04:49	chk	0.0009		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5541.000000 Upper Bound : 5741.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:45	chk	5645.9404		
3-SEP-2007 07:05	chk	5646.9814		
4-SEP-2007 05:16	chk	5649.0142		
4-SEP-2007 05:28	chk	5646.6436		
5-SEP-2007 05:34	chk	5646.1523		
5-SEP-2007 05:46	chk	5647.0898		
6-SEP-2007 06:16	chk	5646.0249		
7-SEP-2007 06:16	chk	5645.6641		
8-SEP-2007 08:03	chk	5645.6719		
10-SEP-2007 04:59	chk	5646.0591		
11-SEP-2007 04:41	chk	5645.4868		
12-SEP-2007 04:56	chk	5648.1851		
12-SEP-2007 05:09	chk	5645.4492		

13-SEP-2007 04:48	chk	5645.6616			
14-SEP-2007 04:49	chk	5645.7456			
15-SEP-2007 07:57	chk	5646.0342			
15-SEP-2007 08:12	chk	5646.0933			
17-SEP-2007 04:48	chk	5646.0991			
18-SEP-2007 05:15	chk	5645.9800			
19-SEP-2007 05:21	chk	5645.6587			
20-SEP-2007 04:53	chk	5645.2949			
21-SEP-2007 04:51	chk	5645.8062			
21-SEP-2007 05:05	chk	5648.3403			
21-SEP-2007 05:30	chk	5647.0083			
22-SEP-2007 08:47	chk	5644.9795			
22-SEP-2007 08:59	chk	5645.2993			
22-SEP-2007 09:11	chk	5645.1177			
24-SEP-2007 04:49	chk	5645.8247			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.950000 Upper Bound : 3.110000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 2.532997 Std Deviation : 0.192958

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		2.8514					
3-SEP-2007 07:05	chk		2.4636					
4-SEP-2007 05:16	chk		2.0666	In				
4-SEP-2007 05:28	chk		3.0885	In				
5-SEP-2007 05:34	chk		3.1019	In				
5-SEP-2007 05:46	chk		2.4862					
6-SEP-2007 06:16	chk		2.4890					

7-SEP-2007 06:16	chk	3.0573	In	
8-SEP-2007 08:03	chk	2.6774		
10-SEP-2007 04:59	chk	2.6131		
11-SEP-2007 04:41	chk	2.7513		
12-SEP-2007 04:56	chk	2.1561		
12-SEP-2007 05:09	chk	2.7304		
13-SEP-2007 04:48	chk	2.6425		
14-SEP-2007 04:49	chk	2.8985		
15-SEP-2007 07:57	chk	2.3454		
15-SEP-2007 08:12	chk	2.5936		
17-SEP-2007 04:48	chk	2.8878		
18-SEP-2007 05:15	chk	2.9363	In	
19-SEP-2007 05:21	chk	2.7599		
20-SEP-2007 04:53	chk	2.8404		
21-SEP-2007 04:51	chk	3.1270	Ab Ac	
21-SEP-2007 05:05	chk	2.0357	In	
21-SEP-2007 05:30	chk	2.2651		
22-SEP-2007 08:47	chk	3.1930	Ab Ac	
22-SEP-2007 08:59	chk	2.8996		
22-SEP-2007 09:11	chk	2.6592		
24-SEP-2007 04:49	chk	3.0588	In	

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001300 Upper Bound : 0.016000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.001477 Std Deviation : 0.000044

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS Rej
1-SEP-2007 08:45	chk	0.0015			
3-SEP-2007 07:05	chk	0.0015			
4-SEP-2007 05:16	chk	0.0015			
4-SEP-2007 05:28	chk	0.0015			
5-SEP-2007 05:34	chk	0.0015			

5-SEP-2007 05:46 chk 0.0014 |In| |
 6-SEP-2007 06:16 chk 0.0015 | | |
 7-SEP-2007 06:16 chk 0.0016 |In| |
 8-SEP-2007 08:03 chk 0.0015 | | |
 10-SEP-2007 04:59 chk 0.0014 | | |

Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDE S Rej
11-SEP-2007 04:41	chk		0.0015	
12-SEP-2007 04:56	chk		0.0013	In
12-SEP-2007 05:09	chk		0.0015	
13-SEP-2007 04:48	chk		0.0015	
14-SEP-2007 04:49	chk		0.0014	
15-SEP-2007 07:57	chk		0.0014	In
15-SEP-2007 08:12	chk		0.0015	
17-SEP-2007 04:48	chk		0.0014	
18-SEP-2007 05:15	chk		0.0015	
19-SEP-2007 05:21	chk		0.0014	
20-SEP-2007 04:53	chk		0.0015	
21-SEP-2007 04:51	chk		0.0015	
21-SEP-2007 05:05	chk		0.0014	
21-SEP-2007 05:30	chk		0.0015	
22-SEP-2007 08:47	chk		0.0014	
22-SEP-2007 08:59	chk		0.0014	
22-SEP-2007 09:11	chk		0.0016	
24-SEP-2007 04:49	chk		0.0015	

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3020.000000 Upper Bound : 3220.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDE S Rej
1-SEP-2007 08:45	chk		3123.3296	
3-SEP-2007 07:05	chk		3123.6099	
4-SEP-2007 05:16	chk		3123.7209	
4-SEP-2007 05:28	chk		3124.3611	
5-SEP-2007 05:34	chk		3123.8445	

5-SEP-2007 05:46	chk	3123.7363			
6-SEP-2007 06:16	chk	3123.5286			
7-SEP-2007 06:16	chk	3123.2188			
8-SEP-2007 08:03	chk	3123.1931			
10-SEP-2007 04:59	chk	3123.7690			
11-SEP-2007 04:41	chk	3123.1445			
12-SEP-2007 04:56	chk	3123.1436			
12-SEP-2007 05:09	chk	3123.1619			
13-SEP-2007 04:48	chk	3123.5432			
14-SEP-2007 04:49	chk	3123.6538			
15-SEP-2007 07:57	chk	3123.5076			
15-SEP-2007 08:12	chk	3123.6409			
17-SEP-2007 04:48	chk	3123.6611			
18-SEP-2007 05:15	chk	3123.4832			
19-SEP-2007 05:21	chk	3123.1191			
20-SEP-2007 04:53	chk	3123.2046			
21-SEP-2007 04:51	chk	3123.3469			
21-SEP-2007 05:05	chk	3123.7556			
21-SEP-2007 05:30	chk	3123.2148			
22-SEP-2007 08:47	chk	3123.1023			
22-SEP-2007 08:59	chk	3123.3228			

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
22-SEP-2007 09:11	chk		3122.9268					
24-SEP-2007 04:49	chk		3123.3774					

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.495000 Upper Bound : 2.030000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 1.766911 Std Deviation : 0.090562

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk	1.7712			
3-SEP-2007 07:05	chk	1.9581	In		
4-SEP-2007 05:16	chk	1.6837			
4-SEP-2007 05:28	chk	1.8569			
5-SEP-2007 05:34	chk	2.0982	Ab Ac		
5-SEP-2007 05:46	chk	1.9579	In		
6-SEP-2007 06:16	chk	1.8893			
7-SEP-2007 06:16	chk	1.8418			
8-SEP-2007 08:03	chk	1.9687	In		
10-SEP-2007 04:59	chk	1.9347			
11-SEP-2007 04:41	chk	1.8644			
12-SEP-2007 04:56	chk	1.7671			
12-SEP-2007 05:09	chk	1.8724			
13-SEP-2007 04:48	chk	1.7680			
14-SEP-2007 04:49	chk	1.9409			
15-SEP-2007 07:57	chk	2.0650	Ab Ac		
15-SEP-2007 08:12	chk	1.8729			
17-SEP-2007 04:48	chk	1.9915	In		
18-SEP-2007 05:15	chk	1.8502			
19-SEP-2007 05:21	chk	2.0126	In		
20-SEP-2007 04:53	chk	1.9968	In		
21-SEP-2007 04:51	chk	1.9114			
21-SEP-2007 05:05	chk	1.8965			
21-SEP-2007 05:30	chk	1.9956	In		
22-SEP-2007 08:47	chk	1.8289			
22-SEP-2007 08:59	chk	2.0544	Ab Ac		
22-SEP-2007 09:11	chk	1.9949	In		
24-SEP-2007 04:49	chk	1.9679	In		

Quality Assurance Report.

Generated 25-SEP-2007 13:48:57.03

QA Filename : \$DISK1:[GER6.QA]BKG.QAF;3

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.126556 Std Deviation : 0.016478

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES	Rej
2-SEP-2007 07:27	bkg		0.1127		
9-SEP-2007 06:53	bkg		0.1087		
16-SEP-2007 07:28	bkg		0.1180		
23-SEP-2007 07:56	bkg		0.1091		

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.093709 Std Deviation : 0.044835

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES	Rej
2-SEP-2007 07:27	bkg		0.0884		
9-SEP-2007 06:53	bkg		0.0861		
16-SEP-2007 07:28	bkg		0.0877		
23-SEP-2007 07:56	bkg		0.0858		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.045431 Std Deviation : 0.002505

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES	Rej
2-SEP-2007 07:27	bkg		0.0464		
9-SEP-2007 06:53	bkg		0.0454		

16-SEP-2007 07:28 bkg 0.0489 | | |
 23-SEP-2007 07:56 bkg 0.0459 | | |

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.054725 Std Deviation : 0.004243

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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2-SEP-2007 07:27 bkg			0.0518					
9-SEP-2007 06:53 bkg			0.0551					
16-SEP-2007 07:28 bkg			0.0531					
23-SEP-2007 07:56 bkg			0.0567					

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.070487 Std Deviation : 0.032789

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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2-SEP-2007 07:27 bkg			0.0673					
9-SEP-2007 06:53 bkg			0.0732					
16-SEP-2007 07:28 bkg			0.0707					
23-SEP-2007 07:56 bkg			0.0691					

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.074650 Std Deviation : 0.003675

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0743		
9-SEP-2007 06:53	bkg		0.0789		
16-SEP-2007 07:28	bkg		0.0764		
23-SEP-2007 07:56	bkg		0.0756		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.065952 Std Deviation : 0.003198

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0649		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
9-SEP-2007 06:53	bkg		0.0662		
16-SEP-2007 07:28	bkg		0.0654		
23-SEP-2007 07:56	bkg		0.0621		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.120038 Std Deviation : 0.011809

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.1114					
9-SEP-2007 06:53	bkg		0.1095					
16-SEP-2007 07:28	bkg		0.1131					
23-SEP-2007 07:56	bkg		0.1096					

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.092037 Std Deviation : 0.009211

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0884					
9-SEP-2007 06:53	bkg		0.0883					
16-SEP-2007 07:28	bkg		0.0898					
23-SEP-2007 07:56	bkg		0.0875					

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.072989 Std Deviation : 0.010648

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0662			
9-SEP-2007 06:53	bkg		0.0714			

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
16-SEP-2007 07:28	bkg		0.0696			
23-SEP-2007 07:56	bkg		0.0705			

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.108494 Std Deviation : 0.010388

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0980			
9-SEP-2007 06:53	bkg		0.0912			
16-SEP-2007 07:28	bkg		0.0986			
23-SEP-2007 07:56	bkg		0.0957			

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.760096 Std Deviation : 0.047420

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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2-SEP-2007 07:27 bkg	0.7178	
9-SEP-2007 06:53 bkg	0.7191	
16-SEP-2007 07:28 bkg	0.7337	
23-SEP-2007 07:56 bkg	0.7042	

Quality Assurance Report.

Generated 25-SEP-2007 13:48:45.02

QA Filename : \$DISK1:[GER7.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.005842 Upper Bound : 0.006184

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.006013 Std Deviation : 0.000057

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
1-SEP-2007 08:45	CHK		0.0060			
3-SEP-2007 07:05	CHK		0.0062	In		
4-SEP-2007 05:16	CHK		0.0060			
5-SEP-2007 05:17	CHK		0.0060			
6-SEP-2007 06:16	CHK		0.0060			
7-SEP-2007 06:16	CHK		0.0060			
8-SEP-2007 08:03	CHK		0.0061			
10-SEP-2007 04:59	CHK		0.0060			
11-SEP-2007 04:41	CHK		0.0060			
12-SEP-2007 04:56	CHK		0.0061			
13-SEP-2007 04:48	CHK		0.0060			
14-SEP-2007 04:49	CHK		0.0059			
15-SEP-2007 07:57	CHK		0.0061			
17-SEP-2007 04:48	CHK		0.0060			
18-SEP-2007 04:40	CHK		0.0060			
19-SEP-2007 05:21	CHK		0.0060			
20-SEP-2007 04:53	CHK		0.0061			
21-SEP-2007 04:51	CHK		0.0060			
22-SEP-2007 08:47	CHK		0.0060			
24-SEP-2007 04:49	CHK		0.0059	In		

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 386.500000 Upper Bound : 586.500000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
Mean : 486.536133 Std Deviation : 0.719594

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	CHK		486.3427					
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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3-SEP-2007 07:05	CHK		486.3862					
4-SEP-2007 05:16	CHK		486.3602					
5-SEP-2007 05:17	CHK		486.3270					
6-SEP-2007 06:16	CHK		486.3929					
7-SEP-2007 06:16	CHK		486.3875					
8-SEP-2007 08:03	CHK		486.2941					
10-SEP-2007 04:59	CHK		486.3806					
11-SEP-2007 04:41	CHK		486.2720					
12-SEP-2007 04:56	CHK		486.2917					
13-SEP-2007 04:48	CHK		486.3411					
14-SEP-2007 04:49	CHK		486.3550					
15-SEP-2007 07:57	CHK		486.3304					
17-SEP-2007 04:48	CHK		486.3391					
18-SEP-2007 04:40	CHK		486.3185					
19-SEP-2007 05:21	CHK		486.3224					
20-SEP-2007 04:53	CHK		486.3258					
21-SEP-2007 04:51	CHK		486.3412					
22-SEP-2007 08:47	CHK		486.3119					
24-SEP-2007 04:49	CHK		486.3284					

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.025977 Std Deviation : 0.025441

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
1-SEP-2007 08:45	CHK		1.0475					
3-SEP-2007 07:05	CHK		0.9948					
4-SEP-2007 05:16	CHK		0.9978					
5-SEP-2007 05:17	CHK		1.0272					
6-SEP-2007 06:16	CHK		0.9866					
7-SEP-2007 06:16	CHK		1.0099					
8-SEP-2007 08:03	CHK		1.0569					
10-SEP-2007 04:59	CHK		1.0053					
11-SEP-2007 04:41	CHK		1.0081					
12-SEP-2007 04:56	CHK		1.0163					
13-SEP-2007 04:48	CHK		1.0099					
14-SEP-2007 04:49	CHK		1.0415					
15-SEP-2007 07:57	CHK		1.0299					
17-SEP-2007 04:48	CHK		1.0274					
18-SEP-2007 04:40	CHK		0.9810					
19-SEP-2007 05:21	CHK		1.0004					
20-SEP-2007 04:53	CHK	✓	1.0264					
21-SEP-2007 04:51	CHK		1.0198					
22-SEP-2007 08:47	CHK		1.0433					
24-SEP-2007 04:49	CHK		1.0270					

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000876 Upper Bound : 0.001030

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.000951 Std Deviation : 0.000025

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|BS Rej

1-SEP-2007 08:45	CHK		0.0009	In
3-SEP-2007 07:05	CHK		0.0010	
4-SEP-2007 05:16	CHK		0.0009	
5-SEP-2007 05:17	CHK		0.0009	
6-SEP-2007 06:16	CHK		0.0010	
7-SEP-2007 06:16	CHK		0.0010	
8-SEP-2007 08:03	CHK		0.0009	
10-SEP-2007 04:59	CHK		0.0009	
11-SEP-2007 04:41	CHK		0.0010	
12-SEP-2007 04:56	CHK		0.0010	
13-SEP-2007 04:48	CHK		0.0010	In
14-SEP-2007 04:49	CHK		0.0010	
15-SEP-2007 07:57	CHK		0.0010	
17-SEP-2007 04:48	CHK		0.0010	
18-SEP-2007 04:40	CHK		0.0009	
19-SEP-2007 05:21	CHK		0.0010	
20-SEP-2007 04:53	CHK		0.0009	
21-SEP-2007 04:51	CHK		0.0009	
22-SEP-2007 08:47	CHK		0.0009	In
24-SEP-2007 04:49	CHK		0.0009	

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5528.299805 Upper Bound : 5728.299805

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 5628.259766 Std Deviation : 4.183611

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		5627.7061		
3-SEP-2007 07:05	CHK		5627.9883		
4-SEP-2007 05:16	CHK		5627.7710		
5-SEP-2007 05:17	CHK		5628.2236		
6-SEP-2007 06:16	CHK		5628.0020		
7-SEP-2007 06:16	CHK		5627.9380		
8-SEP-2007 08:03	CHK		5628.3862		
10-SEP-2007 04:59	CHK		5627.9619		
11-SEP-2007 04:41	CHK		5627.8330		
12-SEP-2007 04:56	CHK		5627.8867		
13-SEP-2007 04:48	CHK		5627.7900		
14-SEP-2007 04:49	CHK		5628.1050		
15-SEP-2007 07:57	CHK		5628.2729		
17-SEP-2007 04:48	CHK		5628.4287		
18-SEP-2007 04:40	CHK		5628.5674		
19-SEP-2007 05:21	CHK		5628.1982		
20-SEP-2007 04:53	CHK		5628.2061		
21-SEP-2007 04:51	CHK		5628.2368		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
22-SEP-2007 08:47	CHK		5628.0044		
24-SEP-2007 04:49	CHK		5628.0728		

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.955873 Std Deviation : 0.112134

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	CHK		2.0498		
3-SEP-2007 07:05	CHK		1.9697		

4-SEP-2007 05:16	CHK	1.9425		
5-SEP-2007 05:17	CHK	1.9026		
6-SEP-2007 06:16	CHK	1.9847		
7-SEP-2007 06:16	CHK	1.8857		
8-SEP-2007 08:03	CHK	1.8222		
10-SEP-2007 04:59	CHK	2.0781		
11-SEP-2007 04:41	CHK	1.9468		
12-SEP-2007 04:56	CHK	2.0254		
13-SEP-2007 04:48	CHK	1.9471		
14-SEP-2007 04:49	CHK	1.7226	In	
15-SEP-2007 07:57	CHK	2.1038		
17-SEP-2007 04:48	CHK	2.1038		
18-SEP-2007 04:40	CHK	1.7966		
19-SEP-2007 05:21	CHK	2.0447		
20-SEP-2007 04:53	CHK	1.8909		
21-SEP-2007 04:51	CHK	2.1156		
22-SEP-2007 08:47	CHK	1.8539		
24-SEP-2007 04:49	CHK	1.8390		

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001424 Upper Bound : 0.001700

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.001563 Std Deviation : 0.000047

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	CHK		0.0016					
3-SEP-2007 07:05	CHK		0.0015					

Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
4-SEP-2007 05:16	CHK		0.0016					
5-SEP-2007 05:17	CHK		0.0016					

6-SEP-2007 06:16	CHK	0.0015	
7-SEP-2007 06:16	CHK	0.0016	
8-SEP-2007 08:03	CHK	0.0015	
10-SEP-2007 04:59	CHK	0.0015	
11-SEP-2007 04:41	CHK	0.0015	
12-SEP-2007 04:56	CHK	0.0015	
13-SEP-2007 04:48	CHK	0.0015	In
14-SEP-2007 04:49	CHK	0.0015	In
15-SEP-2007 07:57	CHK	0.0016	
17-SEP-2007 04:48	CHK	0.0015	
18-SEP-2007 04:40	CHK	0.0015	
19-SEP-2007 05:21	CHK	0.0015	In
20-SEP-2007 04:53	CHK	0.0015	
21-SEP-2007 04:51	CHK	0.0015	
22-SEP-2007 08:47	CHK	0.0016	
24-SEP-2007 04:49	CHK	0.0015	

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3016.000000 Upper Bound : 3216.000000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 3115.895020 Std Deviation : 2.002718

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:45	CHK	3117.0332		
3-SEP-2007 07:05	CHK	3116.9060		
4-SEP-2007 05:16	CHK	3116.6165		
5-SEP-2007 05:17	CHK	3117.2981		
6-SEP-2007 06:16	CHK	3117.3091		
7-SEP-2007 06:16	CHK	3116.9124		
8-SEP-2007 08:03	CHK	3117.1555		
10-SEP-2007 04:59	CHK	3116.8928		
11-SEP-2007 04:41	CHK	3116.8394		
12-SEP-2007 04:56	CHK	3116.7168		

13-SEP-2007 04:48	CHK	3116.8167			
14-SEP-2007 04:49	CHK	3117.1465			
15-SEP-2007 07:57	CHK	3117.1902			
17-SEP-2007 04:48	CHK	3117.2534			
18-SEP-2007 04:40	CHK	3117.2834			
19-SEP-2007 05:21	CHK	3117.3354			
20-SEP-2007 04:53	CHK	3117.1848			
21-SEP-2007 04:51	CHK	3117.0972			
22-SEP-2007 08:47	CHK	3117.3372			
24-SEP-2007 04:49	CHK	3116.9917			

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.537797 Std Deviation : 0.093511

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	CHK	1.5722			
3-SEP-2007 07:05	CHK	1.5608			
4-SEP-2007 05:16	CHK	1.6696			
5-SEP-2007 05:17	CHK	1.4698			
6-SEP-2007 06:16	CHK	1.5264			
7-SEP-2007 06:16	CHK	1.5530			
8-SEP-2007 08:03	CHK	1.4541			
10-SEP-2007 04:59	CHK	1.4367			
11-SEP-2007 04:41	CHK	1.5364			
12-SEP-2007 04:56	CHK	1.6301			
13-SEP-2007 04:48	CHK	1.5504			
14-SEP-2007 04:49	CHK	1.5629			
15-SEP-2007 07:57	CHK	1.4538			
17-SEP-2007 04:48	CHK	1.4321			
18-SEP-2007 04:40	CHK	1.4169			

19-SEP-2007 05:21	CHK	1.4937			
20-SEP-2007 04:53	CHK	1.4348			
21-SEP-2007 04:51	CHK	1.4512			
22-SEP-2007 08:47	CHK	1.5020			
24-SEP-2007 04:49	CHK	1.3386	In		

Quality Assurance Report. Generated 25-SEP-2007 13:48:46.94

QA Filename : \$DISK1:[GER7.QA]BKG.QAF;2

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.089823 Std Deviation : 0.015773

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.1084					
9-SEP-2007 06:53	bkg		0.0812					
16-SEP-2007 07:29	bkg		0.1031					
23-SEP-2007 07:56	bkg		0.1030					

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.081948 Std Deviation : 0.035732

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0893					

9-SEP-2007 06:53 bkg 0.0786 | | |
 16-SEP-2007 07:29 bkg 0.0870 | | |
 23-SEP-2007 07:56 bkg 0.0829 | | |

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.038889 Std Deviation : 0.002277

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Ref
2-SEP-2007 07:27	bkg		0.0455	In
9-SEP-2007 06:53	bkg		0.0370	
16-SEP-2007 07:29	bkg		0.0421	
23-SEP-2007 07:56	bkg		0.0406	

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.044523 Std Deviation : 0.003292

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Ref
2-SEP-2007 07:27	bkg		0.0459	
9-SEP-2007 06:53	bkg		0.0412	
16-SEP-2007 07:29	bkg		0.0462	
23-SEP-2007 07:56	bkg		0.0441	

Quality Assurance Multi-Test Full Report (continued) Page : 2

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
Mean : 0.061134 Std Deviation : 0.028042

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0642					
9-SEP-2007 06:53	bkg		0.0590					
16-SEP-2007 07:29	bkg		0.0612					
23-SEP-2007 07:56	bkg		0.0596					

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
Mean : 0.066701 Std Deviation : 0.002973

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0722					
9-SEP-2007 06:53	bkg		0.0655					
16-SEP-2007 07:29	bkg		0.0693					
23-SEP-2007 07:56	bkg		0.0680					

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.056570 Std Deviation : 0.002743

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0612		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
9-SEP-2007 06:53	bkg		0.0521		
16-SEP-2007 07:29	bkg		0.0599		
23-SEP-2007 07:56	bkg		0.0593		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.110908 Std Deviation : 0.007831

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.1227		
9-SEP-2007 06:53	bkg		0.1054		
16-SEP-2007 07:29	bkg		0.1173		
23-SEP-2007 07:56	bkg		0.1156		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 0.082481 Std Deviation : 0.008130

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0926		
9-SEP-2007 06:53	bkg		0.0756		
16-SEP-2007 07:29	bkg		0.0909		
23-SEP-2007 07:56	bkg		0.0893		

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 0.061595 Std Deviation : 0.008794

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
2-SEP-2007 07:27	bkg		0.0660		
9-SEP-2007 06:53	bkg		0.0590		

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
16-SEP-2007 07:29	bkg		0.0654		
23-SEP-2007 07:56	bkg		0.0676		

-- Multi-Test Full Report --

Description : MDA U-235 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 0.095290 Std Deviation : 0.007263

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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2-SEP-2007 07:27 bkg	0.1090		
9-SEP-2007 06:53 bkg	0.0876		
16-SEP-2007 07:29 bkg	0.1020		
23-SEP-2007 07:56 bkg	0.1065		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 0.677822 Std Deviation : 0.033416

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27 bkg			0.7249					
9-SEP-2007 06:53 bkg			0.6674					
16-SEP-2007 07:29 bkg			0.7265					
23-SEP-2007 07:56 bkg			0.7368					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:04.83

QA Filename : \$DISK1:[GER8.QA]CHECK.QAF;3

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----
 Lower Bound : 0.005600 Upper Bound : 0.005900

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----
 Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.005744 Std Deviation : 0.000046

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		0.0057					
1-SEP-2007 09:10	chk		0.0058					
3-SEP-2007 07:05	chk		0.0058					
3-SEP-2007 07:19	chk		0.0057					
3-SEP-2007 07:31	chk		0.0057					
4-SEP-2007 05:16	chk		0.0056	In				
5-SEP-2007 05:17	chk		0.0057					
5-SEP-2007 05:35	chk		0.0058					
6-SEP-2007 06:17	chk		0.0057					
7-SEP-2007 06:16	chk		0.0058					
8-SEP-2007 08:04	chk		0.0057					
10-SEP-2007 04:59	chk		0.0058					
10-SEP-2007 05:15	chk		0.0057					
11-SEP-2007 04:59	chk		0.0057					
12-SEP-2007 04:56	chk		0.0058					
13-SEP-2007 04:49	chk		0.0058	In				
14-SEP-2007 04:49	chk		0.0057					
14-SEP-2007 05:01	chk		0.0057					
15-SEP-2007 07:57	chk		0.0057					
15-SEP-2007 08:14	chk		0.0056	In				
15-SEP-2007 08:33	chk		0.0058					

17-SEP-2007 04:48	chk	0.0058			
18-SEP-2007 05:15	chk	0.0057			
19-SEP-2007 05:21	chk	0.0057			
19-SEP-2007 05:33	chk	0.0057			
20-SEP-2007 04:53	chk	0.0058			
20-SEP-2007 05:07	chk ✓	0.0058			
21-SEP-2007 04:51	chk	0.0058			
22-SEP-2007 08:47	chk	0.0057			
22-SEP-2007 09:01	chk	0.0057			
22-SEP-2007 09:26	chk	0.0058			
24-SEP-2007 04:54	chk	0.0058			

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 386.000000 Upper Bound : 586.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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1-SEP-2007 08:45	chk	487.9464			
1-SEP-2007 09:10	chk	487.9090			
3-SEP-2007 07:05	chk	487.9225			
3-SEP-2007 07:19	chk	487.8979			
3-SEP-2007 07:31	chk	487.8323			
4-SEP-2007 05:16	chk	487.9203			
5-SEP-2007 05:17	chk	487.8284			
5-SEP-2007 05:35	chk	487.8421			
6-SEP-2007 06:17	chk	487.9028			
7-SEP-2007 06:16	chk	487.7960			
8-SEP-2007 08:04	chk	487.7401			
10-SEP-2007 04:59	chk	487.7220			
10-SEP-2007 05:15	chk	487.7350			
11-SEP-2007 04:59	chk	488.3040			
12-SEP-2007 04:56	chk	488.3782			
13-SEP-2007 04:49	chk	488.2681			
14-SEP-2007 04:49	chk	488.1769			

14-SEP-2007 05:01	chk	488.2386			
15-SEP-2007 07:57	chk	488.1512			
15-SEP-2007 08:14	chk	488.1677			
15-SEP-2007 08:33	chk	488.1662			
17-SEP-2007 04:48	chk	488.0795			
18-SEP-2007 05:15	chk	488.0611			
19-SEP-2007 05:21	chk	488.0865			
19-SEP-2007 05:33	chk	488.0916			
20-SEP-2007 04:53	chk	488.0414			
20-SEP-2007 05:07	chk ✓	488.0758			
21-SEP-2007 04:51	chk	488.0905			
22-SEP-2007 08:47	chk	488.1018			
22-SEP-2007 09:01	chk	488.0764			
22-SEP-2007 09:26	chk	488.0711			
24-SEP-2007 04:54	chk	488.1234			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.020000 Upper Bound : 1.130000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.078783 Std Deviation : 0.017153

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		1.1410	Ab	Ac			
1-SEP-2007 09:10	chk		1.1305	Ab	Ac			
3-SEP-2007 07:05	chk		1.1524	Ab	Ac			
3-SEP-2007 07:19	chk		1.1418	Ab	Ac			
3-SEP-2007 07:31	chk		1.1245	In				
4-SEP-2007 05:16	chk		1.1167	In				

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
5-SEP-2007 05:17	chk		1.1376	Ab	Ac			

5-SEP-2007 05:35	chk	1.1230	In	
6-SEP-2007 06:17	chk	1.1056		
7-SEP-2007 06:16	chk	1.1177	In	
8-SEP-2007 08:04	chk	1.1045		
10-SEP-2007 04:59	chk	1.1330	Ab Ac	
10-SEP-2007 05:15	chk	1.0987		
11-SEP-2007 04:59	chk	1.1125		
12-SEP-2007 04:56	chk	1.1250	In	
13-SEP-2007 04:49	chk	1.1199	In	
14-SEP-2007 04:49	chk	1.1328	Ab Ac	
14-SEP-2007 05:01	chk	1.0989		
15-SEP-2007 07:57	chk	1.1312	Ab Ac	
15-SEP-2007 08:14	chk	1.1710	Ab Ac	
15-SEP-2007 08:33	chk	1.1372	Ab Ac	
17-SEP-2007 04:48	chk	1.1213	In	
18-SEP-2007 05:15	chk	1.0927		
19-SEP-2007 05:21	chk	1.1538	Ab Ac	
19-SEP-2007 05:33	chk	1.1067		
20-SEP-2007 04:53	chk	1.1440	Ab Ac	
20-SEP-2007 05:07	chk	1.0961		
21-SEP-2007 04:51	chk	1.1127		
22-SEP-2007 08:47	chk	1.1434	Ab Ac	
22-SEP-2007 09:01	chk	1.1480	Ab Ac	
22-SEP-2007 09:26	chk	1.1273	In	
24-SEP-2007 04:54	chk	1.0872		

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001230 Upper Bound : 0.001460

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.001345 Std Deviation : 0.000038

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
1-SEP-2007 08:45	chk		0.0013		

1-SEP-2007 09:10	chk	0.0014		
3-SEP-2007 07:05	chk	0.0013		
3-SEP-2007 07:19	chk	0.0014		
3-SEP-2007 07:31	chk	0.0013		
4-SEP-2007 05:16	chk	0.0013		
5-SEP-2007 05:17	chk	0.0013		
5-SEP-2007 05:35	chk	0.0014		
6-SEP-2007 06:17	chk	0.0013		
7-SEP-2007 06:16	chk	0.0014	In	
8-SEP-2007 08:04	chk	0.0014		
10-SEP-2007 04:59	chk	0.0013		

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
10-SEP-2007 05:15	chk		0.0013					
11-SEP-2007 04:59	chk		0.0014					
12-SEP-2007 04:56	chk		0.0014					
13-SEP-2007 04:49	chk		0.0014					
14-SEP-2007 04:49	chk		0.0013					
14-SEP-2007 05:01	chk		0.0013					
15-SEP-2007 07:57	chk		0.0013					
15-SEP-2007 08:14	chk		0.0013					
15-SEP-2007 08:33	chk		0.0013					
17-SEP-2007 04:48	chk		0.0014					
18-SEP-2007 05:15	chk		0.0013					
19-SEP-2007 05:21	chk		0.0013					
19-SEP-2007 05:33	chk		0.0013					
20-SEP-2007 04:53	chk		0.0014					
20-SEP-2007 05:07	chk		0.0014					
21-SEP-2007 04:51	chk		0.0013					
22-SEP-2007 08:47	chk		0.0014					
22-SEP-2007 09:01	chk		0.0014					
22-SEP-2007 09:26	chk		0.0014					
24-SEP-2007 04:54	chk		0.0014					

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3012.000000 Upper Bound : 3212.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:45	chk		3116.9189	
1-SEP-2007 09:10	chk		3116.9963	
3-SEP-2007 07:05	chk		3116.7192	
3-SEP-2007 07:19	chk		3116.7993	
3-SEP-2007 07:31	chk		3116.9382	
4-SEP-2007 05:16	chk		3116.8992	
5-SEP-2007 05:17	chk		3116.6602	
5-SEP-2007 05:35	chk		3116.5974	
6-SEP-2007 06:17	chk		3116.8918	
7-SEP-2007 06:16	chk		3116.5095	
8-SEP-2007 08:04	chk		3116.3901	
10-SEP-2007 04:59	chk		3116.0508	
10-SEP-2007 05:15	chk		3116.1917	
11-SEP-2007 04:59	chk		3118.6318	
12-SEP-2007 04:56	chk		3118.6619	
13-SEP-2007 04:49	chk		3118.4500	
14-SEP-2007 04:49	chk		3118.2939	
14-SEP-2007 05:01	chk		3118.2173	
15-SEP-2007 07:57	chk		3118.2517	
15-SEP-2007 08:14	chk		3118.0889	
15-SEP-2007 08:33	chk		3118.1748	
17-SEP-2007 04:48	chk		3118.0181	
18-SEP-2007 05:15	chk		3118.0354	
19-SEP-2007 05:21	chk		3117.8994	

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
19-SEP-2007 05:33	chk		3117.8254	
20-SEP-2007 04:53	chk		3117.6787	
20-SEP-2007 05:07	chk		3117.7839	
21-SEP-2007 04:51	chk		3117.7065	
22-SEP-2007 08:47	chk		3118.0544	
22-SEP-2007 09:01	chk		3117.8066	
22-SEP-2007 09:26	chk		3118.0168	
24-SEP-2007 04:54	chk		3118.0261	

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution

Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 1.500686 Std Deviation : 0.081807

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		1.6118					
1-SEP-2007 09:10	chk		1.5415					
3-SEP-2007 07:05	chk		1.4801					
3-SEP-2007 07:19	chk		1.5137					
3-SEP-2007 07:31	chk		1.5943					
4-SEP-2007 05:16	chk		1.5012					
5-SEP-2007 05:17	chk		1.5556					
5-SEP-2007 05:35	chk		1.6264					
6-SEP-2007 06:17	chk		1.3864					
7-SEP-2007 06:16	chk		1.4387					
8-SEP-2007 08:04	chk		1.5408					
10-SEP-2007 04:59	chk		1.6467					
10-SEP-2007 05:15	chk		1.4994					
11-SEP-2007 04:59	chk		1.6653	In				
12-SEP-2007 04:56	chk		1.6580					
13-SEP-2007 04:49	chk		1.5058					
14-SEP-2007 04:49	chk		1.6420					
14-SEP-2007 05:01	chk		1.5505					
15-SEP-2007 07:57	chk		1.4771					
15-SEP-2007 08:14	chk		1.4767					
15-SEP-2007 08:33	chk		1.6899	In				
17-SEP-2007 04:48	chk		1.4550					
18-SEP-2007 05:15	chk		1.4736					
19-SEP-2007 05:21	chk		1.5871					
19-SEP-2007 05:33	chk		1.4317					
20-SEP-2007 04:53	chk		1.6328					
20-SEP-2007 05:07	chk		1.5290					
21-SEP-2007 04:51	chk		1.7119	In				
22-SEP-2007 08:47	chk		1.5721					
22-SEP-2007 09:01	chk		1.4014					
22-SEP-2007 09:26	chk		1.4370					
24-SEP-2007 04:54	chk		1.5322					

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000740 Upper Bound : 0.000860

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.000805 Std Deviation : 0.000019

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		0.0008					
1-SEP-2007 09:10	chk		0.0008					
3-SEP-2007 07:05	chk		0.0008					
3-SEP-2007 07:19	chk		0.0008					
3-SEP-2007 07:31	chk		0.0008					
4-SEP-2007 05:16	chk		0.0008					
5-SEP-2007 05:17	chk		0.0008					
5-SEP-2007 05:35	chk		0.0008					
6-SEP-2007 06:17	chk		0.0008					
7-SEP-2007 06:16	chk		0.0008					
8-SEP-2007 08:04	chk		0.0008					
10-SEP-2007 04:59	chk		0.0008					
10-SEP-2007 05:15	chk		0.0008					
11-SEP-2007 04:59	chk		0.0008					
12-SEP-2007 04:56	chk		0.0008					
13-SEP-2007 04:49	chk		0.0008					
14-SEP-2007 04:49	chk		0.0008	In				
14-SEP-2007 05:01	chk		0.0008					
15-SEP-2007 07:57	chk		0.0008					
15-SEP-2007 08:14	chk		0.0008					
15-SEP-2007 08:33	chk		0.0008					
17-SEP-2007 04:48	chk		0.0008					
18-SEP-2007 05:15	chk		0.0008					

19-SEP-2007 05:21	chk	0.0008			
19-SEP-2007 05:33	chk	0.0008			
20-SEP-2007 04:53	chk	0.0008			
20-SEP-2007 05:07	chk	0.0008			
21-SEP-2007 04:51	chk	0.0008		In	
22-SEP-2007 08:47	chk	0.0008			
22-SEP-2007 09:01	chk	0.0008			
22-SEP-2007 09:26	chk	0.0008			
24-SEP-2007 04:54	chk	0.0008			

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5526.000000 Upper Bound : 5726.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
1-SEP-2007 08:45	chk	5633.1323						
1-SEP-2007 09:10	chk	5633.2998						
3-SEP-2007 07:05	chk	5632.9116						
3-SEP-2007 07:19	chk	5632.8784						
3-SEP-2007 07:31	chk	5632.7603						
4-SEP-2007 05:16	chk	5632.8730						
5-SEP-2007 05:17	chk	5632.9102						
5-SEP-2007 05:35	chk	5632.6914						
6-SEP-2007 06:17	chk	5632.7549						
7-SEP-2007 06:16	chk	5632.5391						
8-SEP-2007 08:04	chk	5632.1460						
10-SEP-2007 04:59	chk	5631.9883						

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
10-SEP-2007 05:15	chk	5631.9678						
11-SEP-2007 04:59	chk	5636.4053						
12-SEP-2007 04:56	chk	5636.1475						
13-SEP-2007 04:49	chk	5635.5830						
14-SEP-2007 04:49	chk	5635.4517						
14-SEP-2007 05:01	chk	5635.1802						
15-SEP-2007 07:57	chk	5635.3438						

15-SEP-2007 08:14	chk	5635.1401		
15-SEP-2007 08:33	chk	5635.3042		
17-SEP-2007 04:48	chk	5635.2173		
18-SEP-2007 05:15	chk	5635.0562		
19-SEP-2007 05:21	chk	5634.8296		
19-SEP-2007 05:33	chk	5634.9277		
20-SEP-2007 04:53	chk	5634.7559		
20-SEP-2007 05:07	chk	5634.7749		
21-SEP-2007 04:51	chk	5634.7681		
22-SEP-2007 08:47	chk	5635.0396		
22-SEP-2007 09:01	chk	5634.7798		
22-SEP-2007 09:26	chk	5634.8745		
24-SEP-2007 04:54	chk	5634.9487		

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.832282 Std Deviation : 0.100594

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
1-SEP-2007 08:45	chk		1.9264					
1-SEP-2007 09:10	chk		1.8205					
3-SEP-2007 07:05	chk		1.6520					
3-SEP-2007 07:19	chk		1.9189					
3-SEP-2007 07:31	chk		1.7867					
4-SEP-2007 05:16	chk		2.0247					
5-SEP-2007 05:17	chk		2.0136					
5-SEP-2007 05:35	chk		1.8916					
6-SEP-2007 06:17	chk		1.9890					
7-SEP-2007 06:16	chk		1.7606					
8-SEP-2007 08:04	chk		2.0999		In			
10-SEP-2007 04:59	chk		1.9953					
10-SEP-2007 05:15	chk		1.7601					
11-SEP-2007 04:59	chk		1.8222					
12-SEP-2007 04:56	chk		1.8041					
13-SEP-2007 04:49	chk		1.9316					

14-SEP-2007 04:49	chk	1.8193		
14-SEP-2007 05:01	chk	1.8518		
15-SEP-2007 07:57	chk	1.6994		
15-SEP-2007 08:14	chk	1.9423		
15-SEP-2007 08:33	chk	1.9839		

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
17-SEP-2007 04:48	chk	1.8350		
18-SEP-2007 05:15	chk	1.9350		
19-SEP-2007 05:21	chk	1.6718		
19-SEP-2007 05:33	chk	1.7888		
20-SEP-2007 04:53	chk	1.8351		
20-SEP-2007 05:07	chk	1.8955		
21-SEP-2007 04:51	chk	1.7759		
22-SEP-2007 08:47	chk	1.7581		
22-SEP-2007 09:01	chk	1.7903		
22-SEP-2007 09:26	chk	2.0320		
24-SEP-2007 04:54	chk	1.9950		

Quality Assurance Report.

Generated 25-SEP-2007 13:49:06.94

QA Filename : \$DISK1:[GER8.QA]BKG.QAF;4

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.061405 Std Deviation : 0.001976

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg	0.0574	In	
9-SEP-2007 06:53	bkg	0.0594		
16-SEP-2007 07:29	bkg	0.0570	In	
23-SEP-2007 07:56	bkg	0.0557	In	

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.082875 Std Deviation : 0.002281

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0836					
9-SEP-2007 06:53	bkg		0.0850					
16-SEP-2007 07:29	bkg		0.0817					
23-SEP-2007 07:56	bkg		0.0805					

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.035360 Std Deviation : 0.001783

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0340					
9-SEP-2007 06:53	bkg		0.0359					
16-SEP-2007 07:29	bkg		0.0325					
23-SEP-2007 07:56	bkg		0.0364					

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.042463 Std Deviation : 0.001348

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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2-SEP-2007 07:27	bkg		0.0420					
9-SEP-2007 06:53	bkg		0.0429					
16-SEP-2007 07:29	bkg		0.0394	In				
23-SEP-2007 07:56	bkg		0.0413					

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.058281 Std Deviation : 0.002126

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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2-SEP-2007 07:27	bkg		0.0572					
9-SEP-2007 06:53	bkg		0.0593					
16-SEP-2007 07:29	bkg		0.0585					
23-SEP-2007 07:56	bkg		0.0583					

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.063800 Std Deviation : 0.001741

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0636			
9-SEP-2007 06:53	bkg		0.0653			
16-SEP-2007 07:29	bkg		0.0617			
23-SEP-2007 07:56	bkg		0.0666			

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.054773 Std Deviation : 0.002161

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0553			

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
9-SEP-2007 06:53	bkg		0.0598	In		
16-SEP-2007 07:29	bkg		0.0533			
23-SEP-2007 07:56	bkg		0.0554			

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.106784 Std Deviation : 0.002268

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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2-SEP-2007 07:27 bkg	0.1081			
9-SEP-2007 06:53 bkg	0.1075			
16-SEP-2007 07:29 bkg	0.1078			
23-SEP-2007 07:56 bkg	0.1051			

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.081278 Std Deviation : 0.010898

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27 bkg			0.0803					
9-SEP-2007 06:53 bkg			0.0887					
16-SEP-2007 07:29 bkg			0.0815					
23-SEP-2007 07:56 bkg			0.0893					

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.051167 Std Deviation : 0.001783

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27 bkg			0.0528					
9-SEP-2007 06:53 bkg			0.0525					

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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16-SEP-2007 07:29 bkg 0.0516 | | |
 23-SEP-2007 07:56 bkg 0.0526 | | |

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.102046 Std Deviation : 0.002221

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		0.1001					
9-SEP-2007 06:53	bkg		0.1034					
16-SEP-2007 07:29	bkg		0.1052					
23-SEP-2007 07:56	bkg		0.1001					

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		0.6881					
9-SEP-2007 06:53	bkg		0.6602					
16-SEP-2007 07:29	bkg		0.6615					
23-SEP-2007 07:56	bkg		0.6634					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:21.44

QA Filename : \$DISK1:[GER10.QA]CHECK.QAF;4

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.005400 Upper Bound : 0.005800

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00

Mean : 0.005562 Std Deviation : 0.000056

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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1-SEP-2007 08:45	chk		0.0056					
3-SEP-2007 07:05	chk		0.0056					
4-SEP-2007 05:31	chk		0.0056					
5-SEP-2007 05:36	chk		0.0056					
6-SEP-2007 06:17	chk		0.0054	In				
7-SEP-2007 06:17	chk		0.0055					
8-SEP-2007 08:04	chk		0.0056					
10-SEP-2007 05:17	chk		0.0055					
11-SEP-2007 04:56	chk		0.0056					
12-SEP-2007 05:12	chk		0.0055					
13-SEP-2007 05:08	chk		0.0056					
14-SEP-2007 04:49	chk		0.0055					
15-SEP-2007 07:57	chk		0.0055					
17-SEP-2007 05:06	chk		0.0054	In				
18-SEP-2007 04:40	chk		0.0055					
19-SEP-2007 05:36	chk		0.0057					
20-SEP-2007 05:03	chk ✓		0.0055					
21-SEP-2007 05:07	chk		0.0056					
22-SEP-2007 08:47	chk		0.0056					
24-SEP-2007 05:05	chk		0.0056					

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 329.000000 Upper Bound : 529.000000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
Mean : 433.161346 Std Deviation : 0.081999

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
1-SEP-2007 08:45	chk	433.3510	In					

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
3-SEP-2007 07:05	chk	433.3080						
4-SEP-2007 05:31	chk	433.2180						
5-SEP-2007 05:36	chk	433.2477						
6-SEP-2007 06:17	chk	433.2935						
7-SEP-2007 06:17	chk	433.2728						
8-SEP-2007 08:04	chk	433.2436						
10-SEP-2007 05:17	chk	433.3057						
11-SEP-2007 04:56	chk	433.2245						
12-SEP-2007 05:12	chk	433.2663						
13-SEP-2007 05:08	chk	433.2282						
14-SEP-2007 04:49	chk	433.2336						
15-SEP-2007 07:57	chk	433.2142						
17-SEP-2007 05:06	chk	433.2497						
18-SEP-2007 04:40	chk	433.2068						
19-SEP-2007 05:36	chk	433.2430						
20-SEP-2007 05:03	chk ✓	433.2849						
21-SEP-2007 05:07	chk	433.3149						
22-SEP-2007 08:47	chk	433.2535						
24-SEP-2007 05:05	chk	433.2771						

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.200000 Upper Bound : 1.450000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00

Mean : 1.409876 Std Deviation : 0.042171

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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1-SEP-2007 08:45	chk		1.4670	Ab				
3-SEP-2007 07:05	chk		1.4333					
4-SEP-2007 05:31	chk		1.4012					
5-SEP-2007 05:36	chk		1.4705	Ab				
6-SEP-2007 06:17	chk		1.4257					
7-SEP-2007 06:17	chk		1.4797	Ab				
8-SEP-2007 08:04	chk		1.4730	Ab				
10-SEP-2007 05:17	chk		1.4547	Ab				
11-SEP-2007 04:56	chk		1.4482					
12-SEP-2007 05:12	chk		1.4390					
13-SEP-2007 05:08	chk		1.4570	Ab				
14-SEP-2007 04:49	chk		1.4187					
15-SEP-2007 07:57	chk		1.4078					
17-SEP-2007 05:06	chk		1.4177					
18-SEP-2007 04:40	chk		1.4340					
19-SEP-2007 05:36	chk		1.4078					
20-SEP-2007 05:03	chk		1.4575	Ab				
21-SEP-2007 05:07	chk		1.4231					
22-SEP-2007 08:47	chk		1.3775					

see Lab's email response

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
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24-SEP-2007 05:05	chk		1.4779	Ab				
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-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001250 Upper Bound : 0.001410

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00

Mean : 0.001335 Std Deviation : 0.000024

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk		0.0014		
3-SEP-2007 07:05	chk		0.0014		
4-SEP-2007 05:31	chk		0.0013		
5-SEP-2007 05:36	chk		0.0014		
6-SEP-2007 06:17	chk		0.0013		
7-SEP-2007 06:17	chk		0.0013		
8-SEP-2007 08:04	chk		0.0013		
10-SEP-2007 05:17	chk		0.0013		
11-SEP-2007 04:56	chk		0.0014		
12-SEP-2007 05:12	chk		0.0014		
13-SEP-2007 05:08	chk		0.0013		
14-SEP-2007 04:49	chk		0.0013		
15-SEP-2007 07:57	chk		0.0013		
17-SEP-2007 05:06	chk		0.0013		
18-SEP-2007 04:40	chk		0.0013		
19-SEP-2007 05:36	chk		0.0013		
20-SEP-2007 05:03	chk		0.0014		
21-SEP-2007 05:07	chk		0.0013		
22-SEP-2007 08:47	chk		0.0013		
24-SEP-2007 05:05	chk		0.0013		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid

Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5536.000000 Upper Bound : 5737.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS	Rej
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1-SEP-2007 08:45	chk	5634.2837			
3-SEP-2007 07:05	chk	5634.5439			
4-SEP-2007 05:31	chk	5634.0313			
5-SEP-2007 05:36	chk	5634.1538			
6-SEP-2007 06:17	chk	5634.1646			
7-SEP-2007 06:17	chk	5634.4761			

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
8-SEP-2007 08:04	chk	5634.3364						
10-SEP-2007 05:17	chk	5634.6187						
11-SEP-2007 04:56	chk	5634.5142						
12-SEP-2007 05:12	chk	5634.5239						
13-SEP-2007 05:08	chk	5634.2402						
14-SEP-2007 04:49	chk	5634.4180						
15-SEP-2007 07:57	chk	5634.5376						
17-SEP-2007 05:06	chk	5634.5757						
18-SEP-2007 04:40	chk	5634.5620						
19-SEP-2007 05:36	chk	5634.5151						
20-SEP-2007 05:03	chk	5634.4800						
21-SEP-2007 05:07	chk	5634.4775						
22-SEP-2007 08:47	chk	5634.5254						
24-SEP-2007 05:05	chk	5634.7158						

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
 Mean : 2.040116 Std Deviation : 0.097598

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
1-SEP-2007 08:45	chk	2.1605						
3-SEP-2007 07:05	chk	2.0598						
4-SEP-2007 05:31	chk	1.8447	In					
5-SEP-2007 05:36	chk	2.0284						
6-SEP-2007 06:17	chk	1.9835						

7-SEP-2007 06:17	chk	2.0752			
8-SEP-2007 08:04	chk	2.1660			
10-SEP-2007 05:17	chk	2.0144			
11-SEP-2007 04:56	chk	1.7909		In	
12-SEP-2007 05:12	chk	2.0762			
13-SEP-2007 05:08	chk	2.0895			
14-SEP-2007 04:49	chk	2.1507			
15-SEP-2007 07:57	chk	2.0815			
17-SEP-2007 05:06	chk	2.0426			
18-SEP-2007 04:40	chk	2.2081			
19-SEP-2007 05:36	chk	1.9085			
20-SEP-2007 05:03	chk ✓	2.0242			
21-SEP-2007 05:07	chk	2.0051			
22-SEP-2007 08:47	chk	2.0669			
24-SEP-2007 05:05	chk	2.1701			

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001870 Upper Bound : 0.002150

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
 Mean : 0.002016 Std Deviation : 0.000049

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk	0.0020			
3-SEP-2007 07:05	chk	0.0019			
4-SEP-2007 05:31	chk	0.0019			
5-SEP-2007 05:36	chk	0.0020			
6-SEP-2007 06:17	chk	0.0021			
7-SEP-2007 06:17	chk	0.0020			
8-SEP-2007 08:04	chk	0.0020			

10-SEP-2007 05:17	chk	0.0021			
11-SEP-2007 04:56	chk	0.0020			
12-SEP-2007 05:12	chk	0.0020			
13-SEP-2007 05:08	chk	0.0020			
14-SEP-2007 04:49	chk	0.0020			
15-SEP-2007 07:57	chk	0.0020			
17-SEP-2007 05:06	chk	0.0019			
18-SEP-2007 04:40	chk	0.0020			
19-SEP-2007 05:36	chk	0.0021			
20-SEP-2007 05:03	chk	0.0020			
21-SEP-2007 05:07	chk	0.0019	In		
22-SEP-2007 08:47	chk	0.0020			
24-SEP-2007 05:05	chk	0.0020			

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 2990.000000 Upper Bound : 3190.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		3090.2769					
3-SEP-2007 07:05	chk		3090.8455					
4-SEP-2007 05:31	chk		3090.2585					
5-SEP-2007 05:36	chk		3090.5674					
6-SEP-2007 06:17	chk		3090.4038					
7-SEP-2007 06:17	chk		3090.5879					
8-SEP-2007 08:04	chk		3090.6973					
10-SEP-2007 05:17	chk		3090.6421					
11-SEP-2007 04:56	chk		3090.5825					
12-SEP-2007 05:12	chk		3090.7871					
13-SEP-2007 05:08	chk		3090.3101					
14-SEP-2007 04:49	chk		3090.6382					
15-SEP-2007 07:57	chk		3090.5894					
17-SEP-2007 05:06	chk		3090.6316					
18-SEP-2007 04:40	chk		3090.5720					
19-SEP-2007 05:36	chk		3090.7107					
20-SEP-2007 05:03	chk		3090.6885					
21-SEP-2007 05:07	chk		3090.5977					
22-SEP-2007 08:47	chk		3090.5806					

24-SEP-2007 05:05 chk 3090.9207 |||

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 10-MAY-2007 00:00 End Date : 10-OCT-2007 00:00
Mean : 1.741374 Std Deviation : 0.087094

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		1.7155					
3-SEP-2007 07:05	chk		1.7080					
4-SEP-2007 05:31	chk		1.8490					
5-SEP-2007 05:36	chk		1.8843					
6-SEP-2007 06:17	chk		1.8844					
7-SEP-2007 06:17	chk		1.8365					
8-SEP-2007 08:04	chk		1.8485					
10-SEP-2007 05:17	chk		1.7195					
11-SEP-2007 04:56	chk		1.7989					
12-SEP-2007 05:12	chk		1.8556					
13-SEP-2007 05:08	chk		1.7618					
14-SEP-2007 04:49	chk		1.7915					
15-SEP-2007 07:57	chk		1.7584					
17-SEP-2007 05:06	chk		1.8215					
18-SEP-2007 04:40	chk		1.8599					
19-SEP-2007 05:36	chk		1.7302					
20-SEP-2007 05:03	chk		1.6084					
21-SEP-2007 05:07	chk		1.7601					
22-SEP-2007 08:47	chk		1.7925					
24-SEP-2007 05:05	chk		1.8995					

Quality Assurance Report. Generated 25-SEP-2007 13:49:22.95

QA Filename : \$DISK1:[GER10.QA]BKG.QAF;4

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 0.000000 Std Deviation : 0.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UDES	Rej
2-SEP-2007 07:27	bkg		0.0000				
9-SEP-2007 06:53	bkg		0.0000				
16-SEP-2007 07:29	bkg		0.0000				
23-SEP-2007 07:57	bkg		0.0000				

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 9.645209 Std Deviation : 2.430990

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UDES	Rej
2-SEP-2007 07:27	bkg		11.7428				
9-SEP-2007 06:53	bkg		11.8236				
16-SEP-2007 07:29	bkg		12.1162				
23-SEP-2007 07:57	bkg		11.9388				

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 18.328323 Std Deviation : 4.716222

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
2-SEP-2007 07:27	bkg		22.3985			
9-SEP-2007 06:53	bkg		21.6457			

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
16-SEP-2007 07:29	bkg		23.2979			
23-SEP-2007 07:57	bkg		23.0221			

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 18.297325 Std Deviation : 4.720364

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
2-SEP-2007 07:27	bkg		22.9662			
9-SEP-2007 06:53	bkg		24.1458			
16-SEP-2007 07:29	bkg		22.0930			
23-SEP-2007 07:57	bkg		23.2423			

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 14.296664 Std Deviation : 3.669813

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Ref
2-SEP-2007 07:27	bkg		17.5616	
9-SEP-2007 06:53	bkg		17.5682	
16-SEP-2007 07:29	bkg		18.1158	
23-SEP-2007 07:57	bkg		17.9652	

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 16.289078 Std Deviation : 4.193914

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Ref
2-SEP-2007 07:27	bkg		20.3617	
9-SEP-2007 06:53	bkg		19.7192	
16-SEP-2007 07:29	bkg		20.4319	

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Ref
23-SEP-2007 07:57	bkg		19.9694	

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 14.048932 Std Deviation : 3.637539

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Ref
2-SEP-2007 07:27	bkg		17.3169					
9-SEP-2007 06:53	bkg		17.1326					
16-SEP-2007 07:29	bkg		17.9541					
23-SEP-2007 07:57	bkg		17.7331					

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

--- Sample Driven N-Sigma Test Parameters ---

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 8.292564 Std Deviation : 2.162731

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Ref
2-SEP-2007 07:27	bkg		10.0701					
9-SEP-2007 06:53	bkg		10.2386					
16-SEP-2007 07:29	bkg		10.0588					
23-SEP-2007 07:57	bkg		9.8774					

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

--- Sample Driven N-Sigma Test Parameters ---

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 17.908802 Std Deviation : 4.258226

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Ref
2-SEP-2007 07:27	bkg		23.0100					
9-SEP-2007 06:53	bkg		22.3895					

16-SEP-2007 07:29 bkg	21.7672	
23-SEP-2007 07:57 bkg	22.0164	

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 16.695755 Std Deviation : 4.287898

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES	Rej
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 Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES	Rej
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2-SEP-2007 07:27 bkg			21.1573		
9-SEP-2007 06:53 bkg			19.8661		
16-SEP-2007 07:29 bkg			20.5101		
23-SEP-2007 07:57 bkg			20.1640		

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00
 Mean : 5.493475 Std Deviation : 1.424055

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES	Rej
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2-SEP-2007 07:27 bkg			6.6078		
9-SEP-2007 06:53 bkg			6.8439		
16-SEP-2007 07:29 bkg			6.7517		
23-SEP-2007 07:57 bkg			6.9713		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JAN-2007 00:00 End Date : 1-JUL-2007 00:00

Mean : 79.690552 Std Deviation : 20.539301

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UDI	B3	Ref
2-SEP-2007 07:27	bkg		98.4701					
9-SEP-2007 06:53	bkg		96.5950					
16-SEP-2007 07:29	bkg		102.0701					
23-SEP-2007 07:57	bkg		98.3516					

Quality Assurance Report. Generated 25-SEP-2007 13:49:36.25

QA Filename : \$DISK1:[GER11.QA]CHECK.QAF;2

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.006900 Upper Bound : 0.007270

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.007099 Std Deviation : 0.000062

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES Rej
1-SEP-2007 08:45	chk		0.0071		
3-SEP-2007 07:06	chk		0.0071		
4-SEP-2007 05:16	chk		0.0072		
5-SEP-2007 05:17	chk		0.0071		
6-SEP-2007 06:17	chk		0.0070		
7-SEP-2007 06:17	chk		0.0072		
10-SEP-2007 04:59	chk		0.0070		
11-SEP-2007 04:41	chk		0.0070		
11-SEP-2007 04:56	chk		0.0072		
12-SEP-2007 04:56	chk		0.0071		
13-SEP-2007 04:49	chk		0.0072	In	
14-SEP-2007 05:45	chk		0.0071		
15-SEP-2007 07:57	chk		0.0072		
15-SEP-2007 08:17	chk		0.0071		
17-SEP-2007 04:48	chk		0.0071		
18-SEP-2007 04:40	chk		0.0070		
19-SEP-2007 05:26	chk		0.0070		
20-SEP-2007 04:53	chk ✓		0.0070		
21-SEP-2007 04:52	chk		0.0070	In	
22-SEP-2007 08:47	chk		0.0071		
24-SEP-2007 04:49	chk		0.0072	In	

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 430.000000 Upper Bound : 630.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
1-SEP-2007 08:45	chk		530.0656			
3-SEP-2007 07:06	chk		530.0187			
4-SEP-2007 05:16	chk		530.0007			
5-SEP-2007 05:17	chk		530.0092			
6-SEP-2007 06:17	chk		529.9516			
7-SEP-2007 06:17	chk		529.9592			

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
10-SEP-2007 04:59	chk		539.7204			
11-SEP-2007 04:41	chk		537.7434			
11-SEP-2007 04:56	chk		537.7303			
12-SEP-2007 04:56	chk		537.3962			
13-SEP-2007 04:49	chk		537.3322			
14-SEP-2007 05:45	chk		537.5441			
15-SEP-2007 07:57	chk		537.4274			
15-SEP-2007 08:17	chk		537.3803			
17-SEP-2007 04:48	chk		537.3549			
18-SEP-2007 04:40	chk		537.4213			
19-SEP-2007 05:26	chk		537.3439			
20-SEP-2007 04:53	chk		537.2328			
21-SEP-2007 04:52	chk		537.2675			
22-SEP-2007 08:47	chk		537.2721			
24-SEP-2007 04:49	chk		537.0826			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.686990 Std Deviation : 0.008978

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
1-SEP-2007 08:45	chk		0.7092	In		
3-SEP-2007 07:06	chk		0.7042			
4-SEP-2007 05:16	chk		0.6985			
5-SEP-2007 05:17	chk		0.6988			
6-SEP-2007 06:17	chk		0.6997			
7-SEP-2007 06:17	chk		0.6855			
10-SEP-2007 04:59	chk		0.6982			
11-SEP-2007 04:41	chk		0.7066	In		
11-SEP-2007 04:56	chk		0.6985			
12-SEP-2007 04:56	chk		0.6869			
13-SEP-2007 04:49	chk		0.6927			
14-SEP-2007 05:45	chk		0.6707			
15-SEP-2007 07:57	chk		0.7162	Ac		
15-SEP-2007 08:17	chk		0.7005			
17-SEP-2007 04:48	chk		0.6996			
18-SEP-2007 04:40	chk		0.7012			
19-SEP-2007 05:26	chk		0.7074	In		
20-SEP-2007 04:53	chk		0.6981			
21-SEP-2007 04:52	chk		0.6881			
22-SEP-2007 08:47	chk		0.7000			
24-SEP-2007 04:49	chk		0.7007			

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001420 Upper Bound : 0.158000
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.001425 Std Deviation : 0.000331

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		0.0015					
3-SEP-2007 07:06	chk		0.0015					
4-SEP-2007 05:16	chk		0.0015					
5-SEP-2007 05:17	chk		0.0015					
6-SEP-2007 06:17	chk		0.0014					
7-SEP-2007 06:17	chk		0.0015					
10-SEP-2007 04:59	chk		0.0015					
11-SEP-2007 04:41	chk	No Value						
11-SEP-2007 04:56	chk		0.0015					
12-SEP-2007 04:56	chk		0.0015					
13-SEP-2007 04:49	chk		0.0015					
14-SEP-2007 05:45	chk		0.0015					
15-SEP-2007 07:57	chk		0.0015					
15-SEP-2007 08:17	chk		0.0015					
17-SEP-2007 04:48	chk		0.0015					
18-SEP-2007 04:40	chk		0.0015					
19-SEP-2007 05:26	chk		0.0015					
20-SEP-2007 04:53	chk		0.0015					
21-SEP-2007 04:52	chk		0.0015					
22-SEP-2007 08:47	chk		0.0015					
24-SEP-2007 04:49	chk		0.0015					

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5976.000000 Upper Bound : 6176.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 08:45	chk		6072.9678					
3-SEP-2007 07:06	chk		6073.1724					
4-SEP-2007 05:16	chk		6072.9829					
5-SEP-2007 05:17	chk		6072.9180					
6-SEP-2007 06:17	chk		6072.8696					

7-SEP-2007 06:17	chk	6073.0488	
10-SEP-2007 04:59	chk	6185.8838	Ab
11-SEP-2007 04:41	chk	No Value	
11-SEP-2007 04:56	chk	6163.4673	
12-SEP-2007 04:56	chk	6159.5747	
13-SEP-2007 04:49	chk	6158.3560	
14-SEP-2007 05:45	chk	6160.4209	
15-SEP-2007 07:57	chk	6158.5317	
15-SEP-2007 08:17	chk	6158.5996	
17-SEP-2007 04:48	chk	6157.8960	
18-SEP-2007 04:40	chk	6158.7578	
19-SEP-2007 05:26	chk	6158.2700	
20-SEP-2007 04:53	chk ✓	6157.1104	
21-SEP-2007 04:52	chk	6157.2603	
22-SEP-2007 08:47	chk	6156.8389	
24-SEP-2007 04:49	chk	6155.5161	

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 1.798652 Std Deviation : 0.064431

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD B S Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD B S Rej
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1-SEP-2007 08:45	chk	1.7163	
3-SEP-2007 07:06	chk	1.8542	
4-SEP-2007 05:16	chk	1.8625	
5-SEP-2007 05:17	chk	1.9018	
6-SEP-2007 06:17	chk	1.9809	In
7-SEP-2007 06:17	chk	1.8288	
10-SEP-2007 04:59	chk	1.8533	
11-SEP-2007 04:41	chk	No Value	
11-SEP-2007 04:56	chk	1.7422	

12-SEP-2007 04:56	chk	1.8286		
13-SEP-2007 04:49	chk	1.9597	In	
14-SEP-2007 05:45	chk	1.7381		
15-SEP-2007 07:57	chk	1.8152		
15-SEP-2007 08:17	chk	1.8037		
17-SEP-2007 04:48	chk	1.6945		
18-SEP-2007 04:40	chk	1.8299		
19-SEP-2007 05:26	chk	1.7718		
20-SEP-2007 04:53	chk	1.8037		
21-SEP-2007 04:52	chk	1.7138		
22-SEP-2007 08:47	chk	1.7479		
24-SEP-2007 04:49	chk	1.8919		

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

--- Lower/Upper Bounds Test Parameters ---

Lower Bound : 0.002200 Upper Bound : 0.002530

Investigate Level : 2.000000 Action Level : 3.000000

--- Sample Driven N-Sigma Test Parameters ---

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.002352 Std Deviation : 0.000310

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		0.0023					
3-SEP-2007 07:06	chk		0.0024					
4-SEP-2007 05:16	chk		0.0024					
5-SEP-2007 05:17	chk		0.0024					
6-SEP-2007 06:17	chk		0.0024					
7-SEP-2007 06:17	chk		0.0023					
10-SEP-2007 04:59	chk		0.0025					
11-SEP-2007 04:41	chk	No Value						
11-SEP-2007 04:56	chk		0.0024					
12-SEP-2007 04:56	chk		0.0023					
13-SEP-2007 04:49	chk		0.0024					
14-SEP-2007 05:45	chk		0.0024					
15-SEP-2007 07:57	chk		0.0024					
15-SEP-2007 08:17	chk		0.0023					

17-SEP-2007 04:48 chk 0.0024 | | |
 18-SEP-2007 04:40 chk 0.0024 | | |
 19-SEP-2007 05:26 chk 0.0023 | | |

Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
20-SEP-2007 04:53	chk ✓		0.0025					
21-SEP-2007 04:52	chk		0.0025					
22-SEP-2007 08:47	chk		0.0025					
24-SEP-2007 04:49	chk		0.0024					

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3265.000000 Upper Bound : 3465.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 08:45	chk		3362.9958					
3-SEP-2007 07:06	chk		3362.8784					
4-SEP-2007 05:16	chk		3362.8328					
5-SEP-2007 05:17	chk		3362.8232					
6-SEP-2007 06:17	chk		3362.5791					
7-SEP-2007 06:17	chk		3362.8130					
10-SEP-2007 04:59	chk		3425.2480					
11-SEP-2007 04:41	chk		No Value					
11-SEP-2007 04:56	chk		3412.8677					
12-SEP-2007 04:56	chk		3410.6448					
13-SEP-2007 04:49	chk		3409.9849					
14-SEP-2007 05:45	chk		3411.2041					
15-SEP-2007 07:57	chk		3410.2275					
15-SEP-2007 08:17	chk		3410.1226					
17-SEP-2007 04:48	chk		3409.8225					
18-SEP-2007 04:40	chk		3410.3049					
19-SEP-2007 05:26	chk		3409.9844					
20-SEP-2007 04:53	chk ✓		3409.4241					
21-SEP-2007 04:52	chk		3409.6072					
22-SEP-2007 08:47	chk		3409.1501					
24-SEP-2007 04:49	chk		3408.4839					

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 1.309449 Std Deviation : 0.051004

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES Rej
1-SEP-2007 08:45	chk		1.3198		
3-SEP-2007 07:06	chk		1.2700		
4-SEP-2007 05:16	chk		1.3568		
5-SEP-2007 05:17	chk		1.3099		
6-SEP-2007 06:17	chk		1.3864		

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES Rej
7-SEP-2007 06:17	chk		1.2530		
10-SEP-2007 04:59	chk		1.3456		
11-SEP-2007 04:41	chk	No Value			
11-SEP-2007 04:56	chk		1.2912		
12-SEP-2007 04:56	chk		1.2864		
13-SEP-2007 04:49	chk		1.2978		
14-SEP-2007 05:45	chk		1.4487	In	
15-SEP-2007 07:57	chk		1.2324		
15-SEP-2007 08:17	chk		1.2833		
17-SEP-2007 04:48	chk		1.3250		
18-SEP-2007 04:40	chk		1.3571		
19-SEP-2007 05:26	chk		1.2714		
20-SEP-2007 04:53	chk		1.3239		
21-SEP-2007 04:52	chk		1.2785		
22-SEP-2007 08:47	chk		1.4135	In	
24-SEP-2007 04:49	chk		1.3199		

Quality Assurance Report. Generated 25-SEP-2007 13:49:37.87

QA Filename : \$DISK1:[GER11.QA]BKG.QAF;2

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.091627 Std Deviation : 0.025421

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.1039					
9-SEP-2007 06:53	bkg		0.0429					
16-SEP-2007 07:29	bkg		0.1062					
23-SEP-2007 07:57	bkg		0.1018					

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.079423 Std Deviation : 0.002079

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0804					
9-SEP-2007 06:53	bkg		0.0766					
16-SEP-2007 07:29	bkg		0.0777					
23-SEP-2007 07:57	bkg		0.0783					

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.044311 Std Deviation : 0.002411

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0462			
9-SEP-2007 06:53	bkg		0.0435			

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
16-SEP-2007 07:29	bkg		0.0420			
23-SEP-2007 07:57	bkg		0.0440			

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.051430 Std Deviation : 0.002244

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		0.0521			
9-SEP-2007 06:53	bkg		0.0464	In		
16-SEP-2007 07:29	bkg		0.0504			
23-SEP-2007 07:57	bkg		0.0496			

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.064752 Std Deviation : 0.002729

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS Rej
2-SEP-2007 07:27	bkg		0.0652		
9-SEP-2007 06:53	bkg		0.0716	In	
16-SEP-2007 07:29	bkg		0.0663		
23-SEP-2007 07:57	bkg		0.0681		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.072136 Std Deviation : 0.003801

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS Rej
2-SEP-2007 07:27	bkg		0.0742		
9-SEP-2007 06:53	bkg		0.0684		
16-SEP-2007 07:29	bkg		0.0740		

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS Rej
23-SEP-2007 07:57	bkg		0.0706		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.068083 Std Deviation : 0.004526

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0698					
9-SEP-2007 06:53	bkg		0.0591					
16-SEP-2007 07:29	bkg		0.0729					
23-SEP-2007 07:57	bkg		0.0748					

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.086340 Std Deviation : 0.002392

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0849					
9-SEP-2007 06:53	bkg		0.0792	In				
16-SEP-2007 07:29	bkg		0.0841					
23-SEP-2007 07:57	bkg		0.0870					

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.083144 Std Deviation : 0.012332

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.0849					
9-SEP-2007 06:53	bkg		0.0740					

16-SEP-2007 07:29 bkg 0.0807 |||
 23-SEP-2007 07:57 bkg 0.0872 |||

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.057979 Std Deviation : 0.002732

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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2-SEP-2007 07:27 bkg			0.0623			
9-SEP-2007 06:53 bkg			0.0564			
16-SEP-2007 07:29 bkg			0.0576			
23-SEP-2007 07:57 bkg			0.0618			

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.081970 Std Deviation : 0.002214

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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2-SEP-2007 07:27 bkg			0.0813			
9-SEP-2007 06:53 bkg			0.0805			
16-SEP-2007 07:29 bkg			0.0820			
23-SEP-2007 07:57 bkg			0.0829			

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.635112 Std Deviation : 0.014068

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
2-SEP-2007 07:27	bkg		0.6234					
9-SEP-2007 06:53	bkg		0.6432					
16-SEP-2007 07:29	bkg		0.6339					
23-SEP-2007 07:57	bkg		0.6198					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:44.54

QA Filename : \$DISK1:[GER12.QA]CHECK.QAF;2

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.008700 Upper Bound : 0.009110

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.008920 Std Deviation : 0.000063

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Ref
1-SEP-2007 08:46	CHK		0.0089					
3-SEP-2007 07:06	CHK		0.0089					
4-SEP-2007 05:16	CHK		0.0090					
5-SEP-2007 05:18	CHK		0.0089					
6-SEP-2007 06:17	CHK		0.0089					
7-SEP-2007 06:17	CHK		0.0089					
8-SEP-2007 08:04	CHK		0.0088					
10-SEP-2007 04:59	CHK		0.0090					
11-SEP-2007 04:41	CHK		0.0089					
12-SEP-2007 04:56	CHK		0.0089					
13-SEP-2007 04:49	CHK		0.0089					
14-SEP-2007 04:49	CHK		0.0088					
15-SEP-2007 07:57	CHK		0.0090					
17-SEP-2007 04:48	CHK		0.0089					
18-SEP-2007 04:40	CHK		0.0089					
19-SEP-2007 05:21	CHK		0.0089					
20-SEP-2007 04:53	CHK		0.0089					
21-SEP-2007 04:52	CHK		0.0091	In				
22-SEP-2007 08:47	CHK		0.0089					
24-SEP-2007 04:49	CHK		0.0089					

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 345.000000 Upper Bound : 545.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
1-SEP-2007 08:46	CHK		445.6812			
3-SEP-2007 07:06	CHK		445.7051			
4-SEP-2007 05:16	CHK		445.7049			
5-SEP-2007 05:18	CHK		445.6875			
6-SEP-2007 06:17	CHK		445.6837			
7-SEP-2007 06:17	CHK		445.6706			
8-SEP-2007 08:04	CHK		445.6112			

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
10-SEP-2007 04:59	CHK		445.6514			
11-SEP-2007 04:41	CHK		445.5421			
12-SEP-2007 04:56	CHK		445.6054			
13-SEP-2007 04:49	CHK		445.6005			
14-SEP-2007 04:49	CHK		445.7271			
15-SEP-2007 07:57	CHK		445.7359			
17-SEP-2007 04:48	CHK		445.6801			
18-SEP-2007 04:40	CHK		445.6884			
19-SEP-2007 05:21	CHK		445.6209			
20-SEP-2007 04:53	CHK		445.6172			
21-SEP-2007 04:52	CHK		445.6022			
22-SEP-2007 08:47	CHK		445.6105			
24-SEP-2007 04:49	CHK		445.5946			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.840873 Std Deviation : 0.011472

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	CHK		0.8255	
3-SEP-2007 07:06	CHK		0.8371	
4-SEP-2007 05:16	CHK		0.8423	
5-SEP-2007 05:18	CHK		0.8440	
6-SEP-2007 06:17	CHK		0.8252	
7-SEP-2007 06:17	CHK		0.8523	
8-SEP-2007 08:04	CHK		0.8375	
10-SEP-2007 04:59	CHK		0.8424	
11-SEP-2007 04:41	CHK		0.8397	
12-SEP-2007 04:56	CHK		0.8587	
13-SEP-2007 04:49	CHK		0.8643	In
14-SEP-2007 04:49	CHK		0.8364	
15-SEP-2007 07:57	CHK		0.8415	
17-SEP-2007 04:48	CHK		0.8426	
18-SEP-2007 04:40	CHK		0.8412	
19-SEP-2007 05:21	CHK		0.8508	
20-SEP-2007 04:53	CHK		0.8257	
21-SEP-2007 04:52	CHK		0.8458	
22-SEP-2007 08:47	CHK		0.8441	
24-SEP-2007 04:49	CHK		0.8458	

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001525 Upper Bound : 0.001774

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.001650 Std Deviation : 0.000041

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD DS	Rej
1-SEP-2007 08:46	CHK		0.0016		
3-SEP-2007 07:06	CHK		0.0016		
4-SEP-2007 05:16	CHK		0.0017		
5-SEP-2007 05:18	CHK		0.0016		
6-SEP-2007 06:17	CHK		0.0017		
7-SEP-2007 06:17	CHK		0.0017		
8-SEP-2007 08:04	CHK		0.0016		
10-SEP-2007 04:59	CHK		0.0016		
11-SEP-2007 04:41	CHK		0.0017		
12-SEP-2007 04:56	CHK		0.0017		
13-SEP-2007 04:49	CHK		0.0016		
14-SEP-2007 04:49	CHK		0.0017		
15-SEP-2007 07:57	CHK		0.0017		
17-SEP-2007 04:48	CHK		0.0017		
18-SEP-2007 04:40	CHK		0.0017		
19-SEP-2007 05:21	CHK		0.0017		
20-SEP-2007 04:53	CHK		0.0016		
21-SEP-2007 04:52	CHK		0.0017		
22-SEP-2007 08:47	CHK		0.0017		
24-SEP-2007 04:49	CHK		0.0017		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid

Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5540.000000 Upper Bound : 5740.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD DS	Rej
1-SEP-2007 08:46	CHK		5640.0024		
3-SEP-2007 07:06	CHK		5639.8208		
4-SEP-2007 05:16	CHK		5639.8530		
5-SEP-2007 05:18	CHK		5640.0171		
6-SEP-2007 06:17	CHK		5639.8398		
7-SEP-2007 06:17	CHK		5640.1948		
8-SEP-2007 08:04	CHK		5639.9243		
10-SEP-2007 04:59	CHK		5639.9448		
11-SEP-2007 04:41	CHK		5639.5752		

12-SEP-2007 04:56	CHK	5639.9458		
13-SEP-2007 04:49	CHK	5639.7134		
14-SEP-2007 04:49	CHK	5640.2910		
15-SEP-2007 07:57	CHK	5640.2520		
17-SEP-2007 04:48	CHK	5640.2114		
18-SEP-2007 04:40	CHK	5640.0591		
19-SEP-2007 05:21	CHK	5639.9263		
20-SEP-2007 04:53	CHK	5640.1704		
21-SEP-2007 04:52	CHK	5639.9395		
22-SEP-2007 08:47	CHK	5639.8774		
24-SEP-2007 04:49	CHK	5640.0562		

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.788466 Std Deviation : 0.076747

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
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1-SEP-2007 08:46	CHK	1.8358		
3-SEP-2007 07:06	CHK	1.8215		
4-SEP-2007 05:16	CHK	1.8218		
5-SEP-2007 05:18	CHK	1.6510		
6-SEP-2007 06:17	CHK	1.8946		
7-SEP-2007 06:17	CHK	1.7636		
8-SEP-2007 08:04	CHK	1.8081		
10-SEP-2007 04:59	CHK	1.8235		
11-SEP-2007 04:41	CHK	1.7473		
12-SEP-2007 04:56	CHK	1.6914		
13-SEP-2007 04:49	CHK	1.8268		
14-SEP-2007 04:49	CHK	1.9808	In	
15-SEP-2007 07:57	CHK	1.8746		
17-SEP-2007 04:48	CHK	1.9172		

18-SEP-2007 04:40	CHK	1.8847		
19-SEP-2007 05:21	CHK	1.7799		
20-SEP-2007 04:53	CHK ✓	1.8207		
21-SEP-2007 04:52	CHK	1.7670		
22-SEP-2007 08:47	CHK	1.7716		
24-SEP-2007 04:49	CHK	1.8431		

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.002470 Upper Bound : 0.002879

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.002675 Std Deviation : 0.000068

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej

1-SEP-2007 08:46	CHK		0.0027					
3-SEP-2007 07:06	CHK		0.0027					
4-SEP-2007 05:16	CHK		0.0027					
5-SEP-2007 05:18	CHK		0.0028					
6-SEP-2007 06:17	CHK		0.0026					
7-SEP-2007 06:17	CHK		0.0027					
8-SEP-2007 08:04	CHK		0.0026					
10-SEP-2007 04:59	CHK		0.0027					
11-SEP-2007 04:41	CHK		0.0026					
12-SEP-2007 04:56	CHK		0.0027					
13-SEP-2007 04:49	CHK		0.0027					
14-SEP-2007 04:49	CHK		0.0026					
15-SEP-2007 07:57	CHK		0.0026					
17-SEP-2007 04:48	CHK		0.0027					
18-SEP-2007 04:40	CHK		0.0027					
19-SEP-2007 05:21	CHK		0.0027					
20-SEP-2007 04:53	CHK ✓		0.0028					
21-SEP-2007 04:52	CHK		0.0028					

Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
22-SEP-2007 08:47	CHK		0.0025	
24-SEP-2007 04:49	CHK		0.0027	

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3024.000000 Upper Bound : 3224.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	CHK		3099.5125	
3-SEP-2007 07:06	CHK		3099.4753	
4-SEP-2007 05:16	CHK		3099.5999	
5-SEP-2007 05:18	CHK		3099.3108	
6-SEP-2007 06:17	CHK		3099.5610	
7-SEP-2007 06:17	CHK		3099.8567	
8-SEP-2007 08:04	CHK		3099.5293	
10-SEP-2007 04:59	CHK		3099.6338	
11-SEP-2007 04:41	CHK		3099.4692	
12-SEP-2007 04:56	CHK		3099.5056	
13-SEP-2007 04:49	CHK		3099.3728	
14-SEP-2007 04:49	CHK		3099.5190	
15-SEP-2007 07:57	CHK		3099.7075	
17-SEP-2007 04:48	CHK		3099.7949	
18-SEP-2007 04:40	CHK		3099.6006	
19-SEP-2007 05:21	CHK		3099.3545	
20-SEP-2007 04:53	CHK		3099.3787	
21-SEP-2007 04:52	CHK		3099.6333	
22-SEP-2007 08:47	CHK		3099.5330	
24-SEP-2007 04:49	CHK		3099.6252	

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 1.403218 Std Deviation : 0.054087

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
1-SEP-2007 08:46	CHK		1.5060	
3-SEP-2007 07:06	CHK		1.5112	
4-SEP-2007 05:16	CHK		1.5148	In
5-SEP-2007 05:18	CHK		1.3840	
6-SEP-2007 06:17	CHK		1.4779	
7-SEP-2007 06:17	CHK		1.3638	
8-SEP-2007 08:04	CHK		1.2537	In
10-SEP-2007 04:59	CHK		1.3779	

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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
11-SEP-2007 04:41	CHK		1.3637	
12-SEP-2007 04:56	CHK		1.3550	
13-SEP-2007 04:49	CHK		1.4381	
14-SEP-2007 04:49	CHK		1.3703	
15-SEP-2007 07:57	CHK		1.3706	
17-SEP-2007 04:48	CHK		1.3791	
18-SEP-2007 04:40	CHK		1.3365	
19-SEP-2007 05:21	CHK		1.4909	
20-SEP-2007 04:53	CHK		1.3923	
21-SEP-2007 04:52	CHK		1.4541	
22-SEP-2007 08:47	CHK		1.5407	In
24-SEP-2007 04:49	CHK		1.2844	In

Quality Assurance Report. Generated 25-SEP-2007 13:49:46.23

QA Filename : \$DISK1:[GER12.QA]BKG.QAF;2

-- Multi-Test Full Report --

Description : MDA K-40 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.000000 Std Deviation : 0.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Ref
2-SEP-2007 07:27	bkg		0.0000	
3-SEP-2007 07:38	bkg		0.0000	
9-SEP-2007 06:53	bkg		0.0000	
16-SEP-2007 07:29	bkg		0.0000	
23-SEP-2007 07:57	bkg		0.0000	

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 15.322645 Std Deviation : 0.474621

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Ref
2-SEP-2007 07:27	bkg		14.8595	
3-SEP-2007 07:38	bkg		15.0686	
9-SEP-2007 06:53	bkg		15.5433	
16-SEP-2007 07:29	bkg		15.6945	
23-SEP-2007 07:57	bkg		15.1325	

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 25.648373 Std Deviation : 1.098100

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
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2-SEP-2007 07:27	bkg		25.8213			
3-SEP-2007 07:38	bkg		23.3998	In		
9-SEP-2007 06:53	bkg		26.4243			
16-SEP-2007 07:29	bkg		23.9394			
23-SEP-2007 07:57	bkg		25.4328			

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 25.329380 Std Deviation : 1.028338

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
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2-SEP-2007 07:27	bkg		25.2678			
3-SEP-2007 07:38	bkg		24.0239			
9-SEP-2007 06:53	bkg		22.4812	In		
16-SEP-2007 07:29	bkg		26.0672			
23-SEP-2007 07:57	bkg		24.2762			

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 20.596582 Std Deviation : 0.771929

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		21.7460	
3-SEP-2007 07:38	bkg		21.0714	
9-SEP-2007 06:53	bkg		20.4353	
16-SEP-2007 07:29	bkg		22.0902	
23-SEP-2007 07:57	bkg		20.0164	

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 22.668747 Std Deviation : 0.920323

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
Quality Assurance Multi-Test Full Report (continued) Page : 3				

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		23.5091	
3-SEP-2007 07:38	bkg		24.4191	
9-SEP-2007 06:53	bkg		22.8416	
16-SEP-2007 07:29	bkg		23.8559	
23-SEP-2007 07:57	bkg		23.8699	

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 20.695162 Std Deviation : 0.570306

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		22.6273	Ac		
3-SEP-2007 07:38	bkg		20.9747			
9-SEP-2007 06:53	bkg		21.5219			
16-SEP-2007 07:29	bkg		21.9181	In		
23-SEP-2007 07:57	bkg		21.4389			

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 13.822400 Std Deviation : 0.446293

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
2-SEP-2007 07:27	bkg		13.8328			
3-SEP-2007 07:38	bkg		13.5977			
9-SEP-2007 06:53	bkg		13.8292			
16-SEP-2007 07:29	bkg		13.3223			
23-SEP-2007 07:57	bkg		14.0967			

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 25.858147 Std Deviation : 2.382447

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
Quality Assurance Multi-Test Full Report (continued)						Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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2-SEP-2007 07:27 bkg	27.6238			
3-SEP-2007 07:38 bkg	26.8509			
9-SEP-2007 06:53 bkg	26.4018			
16-SEP-2007 07:29 bkg	26.9878			
23-SEP-2007 07:57 bkg	27.2487			

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 25.462946 Std Deviation : 1.447129

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Ref
2-SEP-2007 07:27 bkg			27.0428					
3-SEP-2007 07:38 bkg			26.3212					
9-SEP-2007 06:53 bkg			23.2006					
16-SEP-2007 07:29 bkg			26.1767					
23-SEP-2007 07:57 bkg			26.4204					

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 10.611926 Std Deviation : 0.363258

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Ref
2-SEP-2007 07:27 bkg			10.7601					
3-SEP-2007 07:38 bkg			10.4672					
9-SEP-2007 06:53 bkg			10.3103					
16-SEP-2007 07:29 bkg			10.5009					

23-SEP-2007 07:57 bkg 10.4786 | | |

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 125.925743 Std Deviation : 3.582425

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDE	ES	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDE	ES	Rej
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2-SEP-2007 07:27 bkg			128.3416			
3-SEP-2007 07:38 bkg			130.3334			
9-SEP-2007 06:53 bkg			126.4133			
16-SEP-2007 07:29 bkg			124.5615			
23-SEP-2007 07:57 bkg			122.3130			

Quality Assurance Report.

Generated 27-SEP-2007 09:27:41.78

QA Filename : \$DISK1:[GER13.QA]CHECK.QAF;5

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.004500 Upper Bound : 0.004800

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.004655 Std Deviation : 0.000050

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 09:10	chk		0.0046					
3-SEP-2007 07:20	chk		0.0046					
4-SEP-2007 05:16	chk		0.0045	In				
5-SEP-2007 05:18	chk		0.0046					
6-SEP-2007 06:36	chk		0.0046					
7-SEP-2007 06:34	chk		0.0046	In				
8-SEP-2007 08:21	chk		0.0046					
10-SEP-2007 04:59	chk		0.0047					
11-SEP-2007 04:41	chk		0.0045	In				
12-SEP-2007 04:56	chk		0.0047					
13-SEP-2007 04:49	chk		0.0047					
14-SEP-2007 05:45	chk		0.0047					
15-SEP-2007 08:17	chk		0.0047					
17-SEP-2007 04:48	chk		0.0047					
18-SEP-2007 05:15	chk		0.0047					
19-SEP-2007 05:21	chk		0.0047					
20-SEP-2007 06:18	chk		0.0047					
21-SEP-2007 04:52	chk		0.0047					
22-SEP-2007 09:02	chk		0.0046					
24-SEP-2007 04:49	chk		0.0047					
25-SEP-2007 04:48	chk		0.0046					

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 388.000000 Upper Bound : 588.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
1-SEP-2007 09:10	chk		489.3472					
3-SEP-2007 07:20	chk		489.3957					
4-SEP-2007 05:16	chk		489.3724					
5-SEP-2007 05:18	chk		489.3969					
6-SEP-2007 06:36	chk		489.3927					
7-SEP-2007 06:34	chk		489.4025					

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
8-SEP-2007 08:21	chk		489.2923					
10-SEP-2007 04:59	chk		489.2144					
11-SEP-2007 04:41	chk		489.2791					
12-SEP-2007 04:56	chk		489.2556					
13-SEP-2007 04:49	chk		489.3000					
14-SEP-2007 05:45	chk		489.2356					
15-SEP-2007 08:17	chk		489.2669					
17-SEP-2007 04:48	chk		489.2465					
18-SEP-2007 05:15	chk		489.2393					
19-SEP-2007 05:21	chk		489.2865					
20-SEP-2007 06:18	chk		489.2273					
21-SEP-2007 04:52	chk		489.2587					
22-SEP-2007 09:02	chk		489.2560					
24-SEP-2007 04:49	chk		489.2121					
25-SEP-2007 04:48	chk		489.1987					

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.951647 Std Deviation : 0.015026

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	3 Rej
1-SEP-2007 09:10	chk		0.9788		
3-SEP-2007 07:20	chk		0.9758		
4-SEP-2007 05:16	chk		0.9910	In	
5-SEP-2007 05:18	chk		0.9597		
6-SEP-2007 06:36	chk		0.9827	In	
7-SEP-2007 06:34	chk		0.9505		
8-SEP-2007 08:21	chk		0.9834	In	
10-SEP-2007 04:59	chk		0.9509		
11-SEP-2007 04:41	chk		0.9666		
12-SEP-2007 04:56	chk		0.9714		
13-SEP-2007 04:49	chk		0.9655		
14-SEP-2007 05:45	chk		0.9539		
15-SEP-2007 08:17	chk		0.9655		
17-SEP-2007 04:48	chk		0.9383		
18-SEP-2007 05:15	chk		0.9622		
19-SEP-2007 05:21	chk		0.9779		
20-SEP-2007 06:18	chk		0.9872	In	
21-SEP-2007 04:52	chk		0.9685		
22-SEP-2007 09:02	chk		0.9615		
24-SEP-2007 04:49	chk		0.9583		
25-SEP-2007 04:48	chk		0.9442		

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000857 Upper Bound : 0.001100

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 0.000971 Std Deviation : 0.000038

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD ES Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD ES Rej
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1-SEP-2007 09:10	chk		0.0010	
3-SEP-2007 07:20	chk		0.0010	
4-SEP-2007 05:16	chk		0.0009	In
5-SEP-2007 05:18	chk		0.0010	
6-SEP-2007 06:36	chk		0.0010	
7-SEP-2007 06:34	chk		0.0010	
8-SEP-2007 08:21	chk		0.0010	
10-SEP-2007 04:59	chk		0.0010	
11-SEP-2007 04:41	chk		0.0010	
12-SEP-2007 04:56	chk		0.0010	
13-SEP-2007 04:49	chk		0.0010	
14-SEP-2007 05:45	chk		0.0010	
15-SEP-2007 08:17	chk		0.0010	
17-SEP-2007 04:48	chk		0.0009	
18-SEP-2007 05:15	chk		0.0010	
19-SEP-2007 05:21	chk		0.0010	
20-SEP-2007 06:18	chk		0.0010	
21-SEP-2007 04:52	chk		0.0010	
22-SEP-2007 09:02	chk		0.0010	
24-SEP-2007 04:49	chk		0.0010	
25-SEP-2007 04:48	chk		0.0010	

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5526.000000 Upper Bound : 5726.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD ES Rej
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1-SEP-2007 09:10	chk		5629.9194	
3-SEP-2007 07:20	chk		5630.2163	
4-SEP-2007 05:16	chk		5630.0972	
5-SEP-2007 05:18	chk		5630.1006	
6-SEP-2007 06:36	chk		5629.9604	

7-SEP-2007 06:34	chk	5630.2339		
8-SEP-2007 08:21	chk	5630.3516		
10-SEP-2007 04:59	chk	5630.2700		
11-SEP-2007 04:41	chk	5629.9663		
12-SEP-2007 04:56	chk	5630.1523		
13-SEP-2007 04:49	chk	5630.1479		
14-SEP-2007 05:45	chk	5630.1665		
15-SEP-2007 08:17	chk	5630.1616		
17-SEP-2007 04:48	chk	5630.3560		
18-SEP-2007 05:15	chk	5630.2290		
19-SEP-2007 05:21	chk	5630.1455		
20-SEP-2007 06:18	chk	5630.0049		
21-SEP-2007 04:52	chk	5630.1831		
22-SEP-2007 09:02	chk	5630.2915		
24-SEP-2007 04:49	chk	5630.0889		
25-SEP-2007 04:48	chk	5629.9634		

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
 Mean : 2.020263 Std Deviation : 0.114163

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD B Ref
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD B Ref
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1-SEP-2007 09:10	chk	1.9950		
3-SEP-2007 07:20	chk	2.0280		
4-SEP-2007 05:16	chk	2.1560		
5-SEP-2007 05:18	chk	2.1214		
6-SEP-2007 06:36	chk	1.9350		
7-SEP-2007 06:34	chk	1.9756		
8-SEP-2007 08:21	chk	2.1804		
10-SEP-2007 04:59	chk	1.9174		
11-SEP-2007 04:41	chk	2.0964		

12-SEP-2007 04:56	chk	2.1846		
13-SEP-2007 04:49	chk	1.8887		
14-SEP-2007 05:45	chk	1.8975		
15-SEP-2007 08:17	chk	2.0028		
17-SEP-2007 04:48	chk	2.0606		
18-SEP-2007 05:15	chk	2.0020		
19-SEP-2007 05:21	chk	2.1562		
20-SEP-2007 06:18	chk	2.0940		
21-SEP-2007 04:52	chk	1.8922		
22-SEP-2007 09:02	chk	2.0475		
24-SEP-2007 04:49	chk	2.0668		
25-SEP-2007 04:48	chk	1.9688		

-- Multi-Test Full Report --

Description : 778.87 KeV Efficiency

Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001447 Upper Bound : 0.001693

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00

Mean : 0.001574 Std Deviation : 0.000041

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	B _s Ref
1-SEP-2007 09:10	chk		0.0017	In	
3-SEP-2007 07:20	chk		0.0016		
4-SEP-2007 05:16	chk		0.0015		
5-SEP-2007 05:18	chk		0.0016		
6-SEP-2007 06:36	chk		0.0017		
7-SEP-2007 06:34	chk		0.0015		
8-SEP-2007 08:21	chk		0.0016		
10-SEP-2007 04:59	chk		0.0015		
11-SEP-2007 04:41	chk		0.0016		
12-SEP-2007 04:56	chk		0.0016		
13-SEP-2007 04:49	chk		0.0016		
14-SEP-2007 05:45	chk		0.0016		
15-SEP-2007 08:17	chk		0.0015		
17-SEP-2007 04:48	chk		0.0016		

18-SEP-2007 05:15 chk 0.0015 | |
 19-SEP-2007 05:21 chk 0.0016 | |
 20-SEP-2007 06:18 chk 0.0015 | |

Quality Assurance Multi-Test Full Report (continued)

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Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
21-SEP-2007 04:52	chk		0.0015					
22-SEP-2007 09:02	chk		0.0016					
24-SEP-2007 04:49	chk		0.0016					
25-SEP-2007 04:48	chk		0.0016					

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channles Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3010.000000 Upper Bound : 3210.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
1-SEP-2007 09:10	chk		3112.9998					
3-SEP-2007 07:20	chk		3112.9233					
4-SEP-2007 05:16	chk		3112.6179					
5-SEP-2007 05:18	chk		3112.6716					
6-SEP-2007 06:36	chk		3112.5950					
7-SEP-2007 06:34	chk		3112.8979					
8-SEP-2007 08:21	chk		3112.8291					
10-SEP-2007 04:59	chk		3112.8149					
11-SEP-2007 04:41	chk		3112.7114					
12-SEP-2007 04:56	chk		3112.7480					
13-SEP-2007 04:49	chk		3112.4465					
14-SEP-2007 05:45	chk		3113.0010					
15-SEP-2007 08:17	chk		3112.9297					
17-SEP-2007 04:48	chk		3112.6584					
18-SEP-2007 05:15	chk		3112.8708					
19-SEP-2007 05:21	chk		3112.8628					
20-SEP-2007 06:18	chk		3112.9668					
21-SEP-2007 04:52	chk		3112.8958					
22-SEP-2007 09:02	chk		3112.8755					
24-SEP-2007 04:49	chk		3112.7300					
25-SEP-2007 04:48	chk		3112.7024					

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-JUL-2005 00:00 End Date : 1-JAN-2006 00:00
Mean : 1.575877 Std Deviation : 0.072096

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Ref
1-SEP-2007 09:10	chk		1.5670					
3-SEP-2007 07:20	chk		1.6457					
4-SEP-2007 05:16	chk		1.6095					
5-SEP-2007 05:18	chk		1.5918					
6-SEP-2007 06:36	chk		1.4329					

Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Ref
7-SEP-2007 06:34	chk		1.6959					
8-SEP-2007 08:21	chk		1.5672					
10-SEP-2007 04:59	chk		1.5639					
11-SEP-2007 04:41	chk		1.5384					
12-SEP-2007 04:56	chk		1.6903					
13-SEP-2007 04:49	chk		1.5661					
14-SEP-2007 05:45	chk		1.5146					
15-SEP-2007 08:17	chk		1.5966					
17-SEP-2007 04:48	chk		1.4782					
18-SEP-2007 05:15	chk		1.6381					
19-SEP-2007 05:21	chk		1.4697					
20-SEP-2007 06:18	chk		1.4598					
21-SEP-2007 04:52	chk		1.6085					
22-SEP-2007 09:02	chk		1.5060					
24-SEP-2007 04:49	chk		1.5897					
25-SEP-2007 04:48	chk		1.4683					

Quality Assurance Report. Generated 27-SEP-2007 09:27:44.70

QA Filename : \$DISK1\GER13.QA\BKG.QAF;3

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : CPM Parameter Type : Nuclide

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
2-SEP-2007 07:27	bkg		0.0000					
9-SEP-2007 06:53	bkg		0.0000					
16-SEP-2007 07:29	bkg		0.0000					
23-SEP-2007 07:57	bkg		0.0000					

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 14.448167 Std Deviation : 7.556842

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
2-SEP-2007 07:27	bkg		14.6070					
9-SEP-2007 06:53	bkg		14.9083					
16-SEP-2007 07:29	bkg		15.2877					
23-SEP-2007 07:57	bkg		15.2173					

-- Multi-Test Full Report --

Description : MDA Co-60 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 25.754026 Std Deviation : 3.823503

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		28.1378					
9-SEP-2007 06:53	bkg		28.8525					
16-SEP-2007 07:29	bkg		24.7534					
23-SEP-2007 07:57	bkg		27.1468					

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 27.361254 Std Deviation : 4.681985

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
Quality Assurance Multi-Test Full Report (continued) Page : 2								

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		28.3104					
9-SEP-2007 06:53	bkg		29.6123					
16-SEP-2007 07:29	bkg		29.4793					
23-SEP-2007 07:57	bkg		28.3882					

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 20.087690 Std Deviation : 11.348620

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		20.1592					

9-SEP-2007 06:53 bkg 20.2680 |||
 16-SEP-2007 07:29 bkg 19.9384 |||
 23-SEP-2007 07:57 bkg 19.7411 |||

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 20.474846 Std Deviation : 2.976390

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		21.7739	
9-SEP-2007 06:53	bkg		21.6724	
16-SEP-2007 07:29	bkg		22.0148	
23-SEP-2007 07:57	bkg		21.8598	

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : CPM Parameter Type : Nuclide
 Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 19.900566 Std Deviation : 2.988951

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		21.1259	

Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
9-SEP-2007 06:53	bkg		21.6613	
16-SEP-2007 07:29	bkg		20.4431	
23-SEP-2007 07:57	bkg		21.4208	

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 13.917275 Std Deviation : 2.474163

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	HS Ref
2-SEP-2007 07:27	bkg		15.3201		
9-SEP-2007 06:53	bkg		15.5840		
16-SEP-2007 07:29	bkg		15.0548		
23-SEP-2007 07:57	bkg		15.3028		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
 Mean : 27.510942 Std Deviation : 4.934300

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	HS Ref
2-SEP-2007 07:27	bkg		30.3107		
9-SEP-2007 06:53	bkg		30.6377		
16-SEP-2007 07:29	bkg		30.8441		
23-SEP-2007 07:57	bkg		30.0585		

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
Mean : 31.126976 Std Deviation : 6.479558

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		33.1194	
9-SEP-2007 06:53	bkg		35.1420	

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
16-SEP-2007 07:29	bkg		33.3807	
23-SEP-2007 07:57	bkg		34.1809	

-- Multi-Test Full Report --

Description : MDA U-235 CPM
Parameter Units : CPM Parameter Type : Nuclide
Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----
Mean : 8.576417 Std Deviation : 1.405362

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD BS Rej
2-SEP-2007 07:27	bkg		9.4412	
9-SEP-2007 06:53	bkg		9.5090	
16-SEP-2007 07:29	bkg		9.4360	
23-SEP-2007 07:57	bkg		9.5121	

-- Multi-Test Full Report --

Description : MDA TH-232 CPM
Parameter Units : CPM Parameter Type : Nuclide
Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : ----- End Date : -----

Mean : 118.414818 Std Deviation : 18.913494

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	ES	Rej
2-SEP-2007 07:27	bkg		128.3246					
9-SEP-2007 06:53	bkg		128.1047					
16-SEP-2007 07:29	bkg		131.3707					
23-SEP-2007 07:57	bkg		131.5324					

Quality Assurance Report.

Generated 25-SEP-2007 13:49:57.47

QA Filename : \$DISK1:GER14.QA]CHECK.QAF;3



-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency

Parameter Units : Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.006158 Std Deviation : 0.000062

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|LS|Rej

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
1-SEP-2007 08:46	chk		0.0061					
3-SEP-2007 07:06	chk		0.0061					
4-SEP-2007 05:16	chk		0.0062					
5-SEP-2007 05:18	chk		0.0062					
6-SEP-2007 06:17	chk		0.0062					
7-SEP-2007 06:17	chk		0.0060					
8-SEP-2007 08:04	chk		0.0061					
10-SEP-2007 04:59	chk		0.0062					
11-SEP-2007 04:41	chk		0.0062					
12-SEP-2007 04:56	chk		0.0062					
13-SEP-2007 04:49	chk		0.0062					
14-SEP-2007 04:49	chk		0.0061					
15-SEP-2007 07:57	chk		0.0061					
17-SEP-2007 04:48	chk		0.0062					
18-SEP-2007 04:40	chk		0.0061					
19-SEP-2007 05:21	chk		0.0062					
20-SEP-2007 04:53	chk		0.0061					
21-SEP-2007 04:52	chk		0.0062					
22-SEP-2007 08:47	chk		0.0062					
24-SEP-2007 04:49	chk		0.0060	In				

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid

Parameter Units : channel Parameter Type : Peak

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
1-SEP-2007 08:46	chk		493.3646			
3-SEP-2007 07:06	chk		493.3355			
4-SEP-2007 05:16	chk		493.3839			
5-SEP-2007 05:18	chk		493.3871			
6-SEP-2007 06:17	chk		493.3247			
7-SEP-2007 06:17	chk		493.3751			
8-SEP-2007 08:04	chk		493.2817			
10-SEP-2007 04:59	chk		493.3173			
11-SEP-2007 04:41	chk		493.2944			
12-SEP-2007 04:56	chk		493.2717			
13-SEP-2007 04:49	chk		493.3170			
14-SEP-2007 04:49	chk		493.3575			
15-SEP-2007 07:57	chk		493.2530			

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
17-SEP-2007 04:48	chk		493.3113			
18-SEP-2007 04:40	chk		493.2593			
19-SEP-2007 05:21	chk		493.2616			
20-SEP-2007 04:53	chk		493.2549			
21-SEP-2007 04:52	chk		493.2574			
22-SEP-2007 08:47	chk		493.2678			
24-SEP-2007 04:49	chk		493.2123			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 1.442194 Std Deviation : 0.060090

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
1-SEP-2007 08:46	chk		1.4249			

3-SEP-2007 07:06	chk	1.4550			
4-SEP-2007 05:16	chk	1.4397			
5-SEP-2007 05:18	chk	1.4451			
6-SEP-2007 06:17	chk	1.4369			
7-SEP-2007 06:17	chk	1.4226			
8-SEP-2007 08:04	chk	1.4118			
10-SEP-2007 04:59	chk	1.4604			
11-SEP-2007 04:41	chk	1.4203			
12-SEP-2007 04:56	chk	1.4079			
13-SEP-2007 04:49	chk	1.4364			
14-SEP-2007 04:49	chk	1.4044			
15-SEP-2007 07:57	chk	1.4359			
17-SEP-2007 04:48	chk	1.3892			
18-SEP-2007 04:40	chk	1.4728			
19-SEP-2007 05:21	chk	1.4381			
20-SEP-2007 04:53	chk	1.4427			
21-SEP-2007 04:52	chk	1.4660			
22-SEP-2007 08:47	chk	1.4533			
24-SEP-2007 04:49	chk	1.4463			

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.001010 Std Deviation : 0.000021

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	NS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 3

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	NS	Rej
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1-SEP-2007 08:46	chk	0.0010			
3-SEP-2007 07:06	chk	0.0010			
4-SEP-2007 05:16	chk	0.0010			
5-SEP-2007 05:18	chk	0.0010			
6-SEP-2007 06:17	chk	0.0010			
7-SEP-2007 06:17	chk	0.0010			

8-SEP-2007 08:04	chk	0.0010	In
10-SEP-2007 04:59	chk	0.0010	
11-SEP-2007 04:41	chk	0.0010	
12-SEP-2007 04:56	chk	0.0010	
13-SEP-2007 04:49	chk	0.0010	
14-SEP-2007 04:49	chk	0.0010	
15-SEP-2007 07:57	chk	0.0010	
17-SEP-2007 04:48	chk	0.0010	
18-SEP-2007 04:40	chk	0.0010	
19-SEP-2007 05:21	chk	0.0010	In
20-SEP-2007 04:53	chk	0.0010	
21-SEP-2007 04:52	chk	0.0010	
22-SEP-2007 08:47	chk	0.0010	
24-SEP-2007 04:49	chk	0.0010	

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid

Parameter Units : channel Parameter Type : Peak

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	MS Rej
1-SEP-2007 08:46	chk	5673.8062			
3-SEP-2007 07:06	chk	5673.8213			
4-SEP-2007 05:16	chk	5673.4624			
5-SEP-2007 05:18	chk	5673.9780			
6-SEP-2007 06:17	chk	5673.6724			
7-SEP-2007 06:17	chk	5673.8604			
8-SEP-2007 08:04	chk	5674.1865			
10-SEP-2007 04:59	chk	5674.1104			
11-SEP-2007 04:41	chk	5673.8628			
12-SEP-2007 04:56	chk	5673.8032			
13-SEP-2007 04:49	chk	5674.1138			
14-SEP-2007 04:49	chk	5674.1592			
15-SEP-2007 07:57	chk	5674.0337			
17-SEP-2007 04:48	chk	5674.0938			
18-SEP-2007 04:40	chk	5674.0610			
19-SEP-2007 05:21	chk	5674.3203			
20-SEP-2007 04:53	chk	5674.0923			
21-SEP-2007 04:52	chk	5674.2207			
22-SEP-2007 08:47	chk	5673.9976			
24-SEP-2007 04:49	chk	5674.1421			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 2.117797 Std Deviation : 0.107560

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	LS	Rej
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1-SEP-2007 08:46	chk		2.1739					
3-SEP-2007 07:06	chk		1.9833					
4-SEP-2007 05:16	chk		2.1084					
5-SEP-2007 05:18	chk		2.1083					
6-SEP-2007 06:17	chk		2.1089					
7-SEP-2007 06:17	chk		2.1080					
8-SEP-2007 08:04	chk		2.0712					
10-SEP-2007 04:59	chk		2.2426					
11-SEP-2007 04:41	chk		2.0270					
12-SEP-2007 04:56	chk		1.9762					
13-SEP-2007 04:49	chk		2.1654					
14-SEP-2007 04:49	chk		2.1165					
15-SEP-2007 07:57	chk		2.0410					
17-SEP-2007 04:48	chk		2.2943					
18-SEP-2007 04:40	chk		2.0092					
19-SEP-2007 05:21	chk		2.0894					
20-SEP-2007 04:53	chk		2.1246					
21-SEP-2007 04:52	chk		2.2854					
22-SEP-2007 08:47	chk		1.9171					
24-SEP-2007 04:49	chk		2.0536					

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.001644 Std Deviation : 0.000041

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Pass/Fail
1-SEP-2007 08:46	chk		0.0016		
3-SEP-2007 07:06	chk		0.0016		
4-SEP-2007 05:16	chk		0.0016		
5-SEP-2007 05:18	chk		0.0016		
6-SEP-2007 06:17	chk		0.0016		
7-SEP-2007 06:17	chk		0.0016		
8-SEP-2007 08:04	chk		0.0016		
10-SEP-2007 04:59	chk		0.0017		
11-SEP-2007 04:41	chk		0.0016		
12-SEP-2007 04:56	chk		0.0016		
13-SEP-2007 04:49	chk		0.0017		
14-SEP-2007 04:49	chk		0.0016		
15-SEP-2007 07:57	chk		0.0016		
17-SEP-2007 04:48	chk		0.0017		
18-SEP-2007 04:40	chk		0.0016		
19-SEP-2007 05:21	chk		0.0016		
20-SEP-2007 04:53	chk		0.0015	In	
21-SEP-2007 04:52	chk		0.0017		
22-SEP-2007 08:47	chk		0.0016		
24-SEP-2007 04:49	chk		0.0016		

-- Multi-Test Full Report --

Description : 778.89 KeV Centroid
 Parameter Units : channels Parameter Type : Peak

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Pass/Fail
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Pass/Fail
1-SEP-2007 08:46	chk		3140.1504		
3-SEP-2007 07:06	chk		3139.9001		
4-SEP-2007 05:16	chk		3139.4302		

5-SEP-2007 05:18	chk	3140.1409		
6-SEP-2007 06:17	chk	3140.1938		
7-SEP-2007 06:17	chk	3139.9937		
8-SEP-2007 08:04	chk	3140.1318		
10-SEP-2007 04:59	chk	3140.3196		
11-SEP-2007 04:41	chk	3140.2292		
12-SEP-2007 04:56	chk	3140.2603		
13-SEP-2007 04:49	chk	3140.1611		
14-SEP-2007 04:49	chk	3140.3782		
15-SEP-2007 07:57	chk	3140.2236		
17-SEP-2007 04:48	chk	3140.2290		
18-SEP-2007 04:40	chk	3140.4204		
19-SEP-2007 05:21	chk	3140.3464		
20-SEP-2007 04:53	chk	3139.9893		
21-SEP-2007 04:52	chk	3140.0955		
22-SEP-2007 08:47	chk	3140.1763		
24-SEP-2007 04:49	chk	3140.4333		

-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 1.799400 Std Deviation : 0.107164

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
1-SEP-2007 08:46	chk		1.8638		
3-SEP-2007 07:06	chk		1.7570		
4-SEP-2007 05:16	chk		1.7298		
5-SEP-2007 05:18	chk		1.7124		
6-SEP-2007 06:17	chk		1.7767		
7-SEP-2007 06:17	chk		1.7141		
8-SEP-2007 08:04	chk		1.6945		
10-SEP-2007 04:59	chk		1.8771		
11-SEP-2007 04:41	chk		1.7736		
12-SEP-2007 04:56	chk		1.9275		
13-SEP-2007 04:49	chk		1.7580		
14-SEP-2007 04:49	chk		1.6864		

15-SEP-2007 07:57	chk	1.6600			
17-SEP-2007 04:48	chk	1.7411			
18-SEP-2007 04:40	chk	1.8812			
19-SEP-2007 05:21	chk	1.8514			
20-SEP-2007 04:53	chk	1.8867			
21-SEP-2007 04:52	chk	1.7961			
22-SEP-2007 08:47	chk	1.9248			
24-SEP-2007 04:49	chk	1.7645			

Quality Assurance Report. Generated 25-SEP-2007 13:49:58.83

QA Filename : \$DISK1:[GER14.QA]BKG.QAF;3

-- Multi-Test Full Report --

Description : MDA K-40 CPM
Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
Mean : 0.121741 Std Deviation : 0.029401

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	Ref
2-SEP-2007 07:28	bkg		0.1298				
9-SEP-2007 06:54	bkg		0.1344				
16-SEP-2007 07:29	bkg		0.1322				
23-SEP-2007 07:57	bkg		0.1359				

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM
Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.116893 Std Deviation : 0.011792

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		0.1103		
9-SEP-2007 06:54	bkg		0.1118		
16-SEP-2007 07:29	bkg		0.1108		
23-SEP-2007 07:57	bkg		0.1131		

-- Multi-Test Full Report --

Description : MDA Co-60 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.049356 Std Deviation : 0.002607

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		0.0486		
9-SEP-2007 06:54	bkg		0.0487		

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
16-SEP-2007 07:29	bkg		0.0467		
23-SEP-2007 07:57	bkg		0.0510		

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.060011 Std Deviation : 0.003166

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
2-SEP-2007 07:28	bkg		0.0608		
9-SEP-2007 06:54	bkg		0.0588		
16-SEP-2007 07:29	bkg		0.0569		
23-SEP-2007 07:57	bkg		0.0607		

-- Multi-Test Full Report --

Description : MDA Ru106da CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.081265 Std Deviation : 0.005879

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
2-SEP-2007 07:28	bkg		0.0779		
9-SEP-2007 06:54	bkg		0.0779		
16-SEP-2007 07:29	bkg		0.0790		
23-SEP-2007 07:57	bkg		0.0778		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.090750 Std Deviation : 0.010128

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
2-SEP-2007 07:28	bkg		0.0876		
9-SEP-2007 06:54	bkg		0.0888		
16-SEP-2007 07:29	bkg		0.0874		

Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
23-SEP-2007 07:57	bkg		0.0889		

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.076672 Std Deviation : 0.006037

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		0.0762		
9-SEP-2007 06:54	bkg		0.0731		
16-SEP-2007 07:29	bkg		0.0733		
23-SEP-2007 07:57	bkg		0.0762		

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
 Mean : 0.137072 Std Deviation : 0.013763

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		0.1303		
9-SEP-2007 06:54	bkg		0.1318		
16-SEP-2007 07:29	bkg		0.1290		
23-SEP-2007 07:57	bkg		0.1342		

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM

Parameter Units : uCi Parameter Type : Nuclide

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.000000

no

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|Rej

2-SEP-2007 07:28 bkg			0.1030 Ab		
9-SEP-2007 06:54 bkg			0.1024 Ab		
16-SEP-2007 07:29 bkg			0.1066 Ab		
23-SEP-2007 07:57 bkg			0.1036 Ab		

See Lab employee

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00
Mean : 0.074837 Std Deviation : 0.001926

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|Rej

Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time Sample ID Sample Analyst Value LU|SD|UD|Rej

2-SEP-2007 07:28 bkg			0.0766		
9-SEP-2007 06:54 bkg			0.0786		
16-SEP-2007 07:29 bkg			0.0761		
23-SEP-2007 07:57 bkg			0.0740		

-- Multi-Test Full Report --

Description : MDA U-235 CPM
Parameter Units : uCi Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-OCT-2006 00:00 End Date : 1-JAN-2007 00:00

Mean : 0.135773 Std Deviation : 0.015997

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		0.1313		
9-SEP-2007 06:54	bkg		0.1314		
16-SEP-2007 07:29	bkg		0.1290		
23-SEP-2007 07:57	bkg		0.1367		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		0.8961		
9-SEP-2007 06:54	bkg		0.8807		
16-SEP-2007 07:29	bkg		0.8937		
23-SEP-2007 07:57	bkg		0.8883		

Quality Assurance Report.

Generated 25-SEP-2007 13:50:26.54

QA Filename : RDND06::RDND06\$DKA100:[GER15.QA]CHECK.QA

-- Multi-Test Full Report --

Description : 121.78 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.007300 Upper Bound : 0.007800

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 0.007601 Std Deviation : 0.000062

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	Rej
1-SEP-2007 09:10	CHK		0.0076				
3-SEP-2007 07:20	CHK		0.0077				
4-SEP-2007 05:31	CHK		0.0076				
5-SEP-2007 05:36	CHK		0.0076				
6-SEP-2007 06:36	CHK		0.0076				
7-SEP-2007 06:34	CHK		0.0076				
8-SEP-2007 08:21	CHK		0.0076				
10-SEP-2007 05:17	CHK		0.0076				
11-SEP-2007 04:56	CHK		0.0075				
12-SEP-2007 05:12	CHK		0.0076				
13-SEP-2007 05:08	CHK		0.0076				
14-SEP-2007 05:04	CHK		0.0076				
15-SEP-2007 08:18	CHK		0.0077				
17-SEP-2007 05:05	CHK		0.0076				
18-SEP-2007 04:54	CHK		0.0075				
19-SEP-2007 05:36	CHK		0.0076				
20-SEP-2007 05:09	CHK		0.0077				
20-SEP-2007 05:21	CHK		0.0076				
21-SEP-2007 05:07	CHK		0.0076				
24-SEP-2007 05:05	CHK		0.0075				

-- Multi-Test Full Report --

Description : 121.78 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 356.000000 Upper Bound : 556.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Pass/Fail	Rej
1-SEP-2007 09:10	CHK		455.7475			
3-SEP-2007 07:20	CHK		455.5985			
4-SEP-2007 05:31	CHK		455.6996			
5-SEP-2007 05:36	CHK		455.6204			
6-SEP-2007 06:36	CHK		455.6341			
7-SEP-2007 06:34	CHK		455.6000			
8-SEP-2007 08:21	CHK		455.4963			

Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Pass/Fail	Rej
10-SEP-2007 05:17	CHK		455.4958			
11-SEP-2007 04:56	CHK		455.5624			
12-SEP-2007 05:12	CHK		455.6324			
13-SEP-2007 05:08	CHK		455.5840			
14-SEP-2007 05:04	CHK		455.6163			
15-SEP-2007 08:18	CHK		455.5929			
17-SEP-2007 05:05	CHK		455.5716			
18-SEP-2007 04:54	CHK		455.5407			
19-SEP-2007 05:36	CHK		455.5611			
20-SEP-2007 05:09	CHK		455.5113			
20-SEP-2007 05:21	CHK		455.5391			
21-SEP-2007 05:07	CHK		455.4798			
24-SEP-2007 05:05	CHK		455.5594			

-- Multi-Test Full Report --

Description : 121.78 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 1.043373 Std Deviation : 0.015692

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
1-SEP-2007 09:10	CHK		1.0398		
3-SEP-2007 07:20	CHK		1.0512		
4-SEP-2007 05:31	CHK		1.0427		
5-SEP-2007 05:36	CHK		1.0346		
6-SEP-2007 06:36	CHK		1.0373		
7-SEP-2007 06:34	CHK		1.0460		
8-SEP-2007 08:21	CHK		1.0321		
10-SEP-2007 05:17	CHK		1.0444		
11-SEP-2007 04:56	CHK		1.0299		
12-SEP-2007 05:12	CHK		1.0320		
13-SEP-2007 05:08	CHK		1.0385		
14-SEP-2007 05:04	CHK		1.0345		
15-SEP-2007 08:18	CHK		1.0489		
17-SEP-2007 05:05	CHK		1.0567		
18-SEP-2007 04:54	CHK		1.0486		
19-SEP-2007 05:36	CHK		1.0335		
20-SEP-2007 05:09	CHK		1.0273		
20-SEP-2007 05:21	CHK		1.0628		
21-SEP-2007 05:07	CHK		1.0365		
24-SEP-2007 05:05	CHK		1.0580		

-- Multi-Test Full Report --

Description : 1407.95 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.000000 Upper Bound : 0.002320

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 0.001211 Std Deviation : 0.000168

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
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Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	PS R
1-SEP-2007 09:10	CHK		0.0012		
3-SEP-2007 07:20	CHK		0.0013		
4-SEP-2007 05:31	CHK		0.0012		
5-SEP-2007 05:36	CHK		0.0012		
6-SEP-2007 06:36	CHK		0.0013		
7-SEP-2007 06:34	CHK		0.0012		
8-SEP-2007 08:21	CHK		0.0012		
10-SEP-2007 05:17	CHK		0.0012		
11-SEP-2007 04:56	CHK		0.0012		
12-SEP-2007 05:12	CHK		0.0012		
13-SEP-2007 05:08	CHK		0.0012		
14-SEP-2007 05:04	CHK		0.0012		
15-SEP-2007 08:18	CHK		0.0012		
17-SEP-2007 05:05	CHK		0.0012		
18-SEP-2007 04:54	CHK		0.0012		
19-SEP-2007 05:36	CHK		0.0012		
20-SEP-2007 05:09	CHK		0.0012		
20-SEP-2007 05:21	CHK		0.0013		
21-SEP-2007 05:07	CHK		0.0012		
24-SEP-2007 05:05	CHK		0.0013		

-- Multi-Test Full Report --

Description : 1407.95 KeV Centroid
 Parameter Units : channel Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 5681.000000 Upper Bound : 5881.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	PS R
1-SEP-2007 09:10	CHK		5784.7461		
3-SEP-2007 07:20	CHK		5784.1685		
4-SEP-2007 05:31	CHK		5783.7861		
5-SEP-2007 05:36	CHK		5783.7847		
6-SEP-2007 06:36	CHK		5783.9634		
7-SEP-2007 06:34	CHK		5784.7637		
8-SEP-2007 08:21	CHK		5784.5156		
10-SEP-2007 05:17	CHK		5783.9307		
11-SEP-2007 04:56	CHK		5783.7856		

12-SEP-2007 05:12	CHK	5783.9771			
13-SEP-2007 05:08	CHK	5784.1528			
14-SEP-2007 05:04	CHK	5783.0811			
15-SEP-2007 08:18	CHK	5783.2622			
17-SEP-2007 05:05	CHK	5783.0088			
18-SEP-2007 04:54	CHK	5783.2466			
19-SEP-2007 05:36	CHK	5783.0313			
20-SEP-2007 05:09	CHK	5782.9136			
20-SEP-2007 05:21	CHK	5782.9668			
21-SEP-2007 05:07	CHK	5783.2061			
24-SEP-2007 05:05	CHK	5782.7720			

-- Multi-Test Full Report --

Description : 1407.95 KeV FWHM Resolution
 Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.511000 Upper Bound : 2.222000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 1.877819 Std Deviation : 0.102255

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	BS	Rej
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1-SEP-2007 09:10	CHK	1.8649			
3-SEP-2007 07:20	CHK	1.8473			
4-SEP-2007 05:31	CHK	1.7879			
5-SEP-2007 05:36	CHK	1.7334			
6-SEP-2007 06:36	CHK	1.9528			
7-SEP-2007 06:34	CHK	1.7741			
8-SEP-2007 08:21	CHK	1.8377			
10-SEP-2007 05:17	CHK	1.9222			
11-SEP-2007 04:56	CHK	1.9205			
12-SEP-2007 05:12	CHK	2.0981		In	
13-SEP-2007 05:08	CHK	1.8703			

14-SEP-2007 05:04	CHK	1.8810			
15-SEP-2007 08:18	CHK	1.9619			
17-SEP-2007 05:05	CHK	1.8318			
18-SEP-2007 04:54	CHK	1.7361			
19-SEP-2007 05:36	CHK	1.9911			
20-SEP-2007 05:09	CHK	1.8409			
20-SEP-2007 05:21	CHK	1.9131			
21-SEP-2007 05:07	CHK	1.9759			
24-SEP-2007 05:05	CHK	1.9906			

-- Multi-Test Full Report --

Description : 778.89 KeV Efficiency
 Parameter Units : Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 0.001800 Upper Bound : 0.002100

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 0.001961 Std Deviation : 0.000306

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	Upper	Lower	Rej
1-SEP-2007 09:10	CHK		0.0020					
3-SEP-2007 07:20	CHK		0.0019					
4-SEP-2007 05:31	CHK		0.0020					
5-SEP-2007 05:36	CHK		0.0021					
6-SEP-2007 06:36	CHK		0.0020					
7-SEP-2007 06:34	CHK		0.0020					
8-SEP-2007 08:21	CHK		0.0019					
10-SEP-2007 05:17	CHK		0.0021					
11-SEP-2007 04:56	CHK		0.0021					
12-SEP-2007 05:12	CHK		0.0020					
13-SEP-2007 05:08	CHK		0.0021					
14-SEP-2007 05:04	CHK		0.0020					
15-SEP-2007 08:18	CHK		0.0020					
17-SEP-2007 05:05	CHK		0.0020					
18-SEP-2007 04:54	CHK		0.0019					
19-SEP-2007 05:36	CHK		0.0020					
20-SEP-2007 05:09	CHK		0.0021	Ab				

20-SEP-2007 05:21 CHK 0.0020

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Quality Assurance Multi-Test Full Report (continued)

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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21-SEP-2007 05:07	CHK		0.0020			
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24-SEP-2007 05:05	CHK		0.0020			
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-- Multi-Test Full Report --

Description : 778.89 KeV Centroid

Parameter Units : channels Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 3077.000000 Upper Bound : 3277.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ES	Rej
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1-SEP-2007 09:10	CHK		3178.7727			
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3-SEP-2007 07:20	CHK		3178.5466			
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4-SEP-2007 05:31	CHK		3178.2188			
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5-SEP-2007 05:36	CHK		3178.1807			
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6-SEP-2007 06:36	CHK		3178.1543			
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7-SEP-2007 06:34	CHK		3178.5164			
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8-SEP-2007 08:21	CHK		3178.5547			
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10-SEP-2007 05:17	CHK		3178.4202			
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11-SEP-2007 04:56	CHK		3178.0166			
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12-SEP-2007 05:12	CHK		3178.4658			
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13-SEP-2007 05:08	CHK		3178.2710			
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14-SEP-2007 05:04	CHK		3177.8137			
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15-SEP-2007 08:18	CHK		3177.7905			
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17-SEP-2007 05:05	CHK		3177.8538			
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18-SEP-2007 04:54	CHK		3177.8796			
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19-SEP-2007 05:36	CHK		3177.7073			
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20-SEP-2007 05:09	CHK		3177.6152			
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20-SEP-2007 05:21	CHK		3177.7668			
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21-SEP-2007 05:07	CHK		3177.9792			
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24-SEP-2007 05:05	CHK		3177.5811			
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-- Multi-Test Full Report --

Description : 778.89 KeV FWHM Resolution

Parameter Units : keV Parameter Type : Peak

---- Lower/Upper Bounds Test Parameters ----

Lower Bound : 1.280000 Upper Bound : 1.720000

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 1.522860 Std Deviation : 0.076613

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
1-SEP-2007 09:10	CHK		1.5021			
3-SEP-2007 07:20	CHK		1.6554			
4-SEP-2007 05:31	CHK		1.5195			
5-SEP-2007 05:36	CHK		1.4917			
6-SEP-2007 06:36	CHK		1.5160			

Quality Assurance Multi-Test Full Report (continued) Page : 6

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	BS	Rej
7-SEP-2007 06:34	CHK		1.5136			
8-SEP-2007 08:21	CHK		1.5191			
10-SEP-2007 05:17	CHK		1.5626			
11-SEP-2007 04:56	CHK		1.6386			
12-SEP-2007 05:12	CHK		1.6404			
13-SEP-2007 05:08	CHK		1.5297			
14-SEP-2007 05:04	CHK		1.5387			
15-SEP-2007 08:18	CHK		1.5611			
17-SEP-2007 05:05	CHK		1.6938	In		
18-SEP-2007 04:54	CHK		1.6187			
19-SEP-2007 05:36	CHK		1.4533			
20-SEP-2007 05:09	CHK		1.6778	In		
20-SEP-2007 05:21	CHK		1.6069			
21-SEP-2007 05:07	CHK		1.6324			
24-SEP-2007 05:05	CHK		1.5483			

Quality Assurance Report. Generated 25-SEP-2007 13:50:33.10

QA Filename : RDND06::RDND06\$DKA100:[GER15.QA]BKG.QAF;2

-- Multi-Test Full Report --

Description : MDA K-40 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Trend Test Test Parameters ----

N Mean Samples : 0 M Slope Samples: 0

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 0.000000 Std Deviation : 0.000000

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	Rej
2-SEP-2007 07:28	bkg		0.0000				
9-SEP-2007 06:54	bkg		0.0000				
16-SEP-2007 07:30	bkg		0.0000				
17-SEP-2007 05:38	bkg		0.0000				
23-SEP-2007 07:58	bkg		0.0000				

-- Multi-Test Full Report --

Description : MDA Cr-51 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 17.827131 Std Deviation : 1.043397

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	Rej
2-SEP-2007 07:28	bkg		19.4140				
9-SEP-2007 06:54	bkg		18.1080				
16-SEP-2007 07:30	bkg		19.0575				
17-SEP-2007 05:38	bkg		17.7156				
23-SEP-2007 07:58	bkg		19.2798				

-- Multi-Test Full Report --

Description : MDA Co-60 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 25.471819 Std Deviation : 1.336739

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 2

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	Rej
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2-SEP-2007 07:28	bkg		27.9501				
9-SEP-2007 06:54	bkg		26.7243				
16-SEP-2007 07:30	bkg		25.9601				
17-SEP-2007 05:38	bkg		25.5500				
23-SEP-2007 07:58	bkg		25.9745				

-- Multi-Test Full Report --

Description : MDA Zn-65 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 26.851849 Std Deviation : 1.326730

Measurement Time	Sample ID	Sample Analyst	Value	LU	SD	UD	Rej
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2-SEP-2007 07:28	bkg		25.7834				
9-SEP-2007 06:54	bkg		28.5092				
16-SEP-2007 07:30	bkg		27.6455				
17-SEP-2007 05:38	bkg		27.6507				
23-SEP-2007 07:58	bkg		27.0274				

-- Multi-Test Full Report --

Description : MDA Ru106da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 21.555796 Std Deviation : 0.650726

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ED	Rej
2-SEP-2007 07:28	bkg		22.7965			
9-SEP-2007 06:54	bkg		21.5385			
16-SEP-2007 07:30	bkg		22.3148			
17-SEP-2007 05:38	bkg		21.2310			
23-SEP-2007 07:58	bkg		23.0054	In		

-- Multi-Test Full Report --

Description : MDA Cs-134 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 24.019569 Std Deviation : 1.449432

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ED	Rej
Quality Assurance Multi-Test Full Report (continued) Page : 3						

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	ED	Rej
2-SEP-2007 07:28	bkg		23.9951			
9-SEP-2007 06:54	bkg		23.7641			
16-SEP-2007 07:30	bkg		25.0453			
17-SEP-2007 05:38	bkg		23.2617			
23-SEP-2007 07:58	bkg		24.2311			

-- Multi-Test Full Report --

Description : MDA Cs-137da CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 21.406004 Std Deviation : 0.927077

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES Rej
2-SEP-2007 07:28	bkg		21.1315	
9-SEP-2007 06:54	bkg		22.5004	
16-SEP-2007 07:30	bkg		24.3665	Ac
17-SEP-2007 05:38	bkg		20.3310	
23-SEP-2007 07:58	bkg		22.3317	

-- Multi-Test Full Report --

Description : MDA Pb-212 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 18.397440 Std Deviation : 1.802250

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UDES Rej
2-SEP-2007 07:28	bkg		20.4106	
9-SEP-2007 06:54	bkg		20.3675	
16-SEP-2007 07:30	bkg		20.8333	
17-SEP-2007 05:38	bkg		19.0624	
23-SEP-2007 07:58	bkg		20.0914	

-- Multi-Test Full Report --

Description : MDA Ra-226da CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 29.479492 Std Deviation : 2.968082

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
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Quality Assurance Multi-Test Full Report (continued) Page : 4

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
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2-SEP-2007 07:28	bkg		34.0617		
9-SEP-2007 06:54	bkg		32.7339		
16-SEP-2007 07:30	bkg		32.5302		
17-SEP-2007 05:38	bkg		31.5680		
23-SEP-2007 07:58	bkg		32.6546		

-- Multi-Test Full Report --

Description : MDA Ra-228 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 30.222523 Std Deviation : 2.478376

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Rej
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2-SEP-2007 07:28	bkg		31.9232		
9-SEP-2007 06:54	bkg		31.0085		
16-SEP-2007 07:30	bkg		33.2423		
17-SEP-2007 05:38	bkg		31.5085		
23-SEP-2007 07:58	bkg		33.1712		

-- Multi-Test Full Report --

Description : MDA U-235 CPM
 Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00
 Mean : 13.805021 Std Deviation : 1.325768

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		15.1628		
9-SEP-2007 06:54	bkg		15.2287		
16-SEP-2007 07:30	bkg		15.1446		
17-SEP-2007 05:38	bkg		14.4146		
23-SEP-2007 07:58	bkg		15.1975		

-- Multi-Test Full Report --

Description : MDA TH-232 CPM

Parameter Units : CPM Parameter Type : Nuclide

Investigate Level : 2.000000 Action Level : 3.000000

---- Sample Driven N-Sigma Test Parameters ----

Start Date : 1-MAY-2007 00:00 End Date : 1-NOV-2007 00:00

Mean : 150.342712 Std Deviation : 8.807827

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
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Quality Assurance Multi-Test Full Report (continued) Page : 5

Measurement Time	Sample ID	Sample Analyst	Value	LU SD UD	Ref
2-SEP-2007 07:28	bkg		158.4681		
9-SEP-2007 06:54	bkg		159.8463		
16-SEP-2007 07:30	bkg		167.8923		
17-SEP-2007 05:38	bkg		156.7121		
23-SEP-2007 07:58	bkg		160.3246		