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NDA Batch Data Report 2007-17

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NDA BATCH REPORT COVER SHEET

NDA Batch Number **2007-17**	Status: ~~NOT~~ VALIDATED JW 10.17.07
Testing Facility: **LLNL Plutonium Facility Segmented Gamma Scanner (SGS)**	

Waste Containers

LL85801034	LL85101368	LL85401657	LL85501375	LL85101655	LL85901355	LL85101018	LL85401657 REPLICATE

100% of the radioassay data in the Batch Data Report must be reviewed.

Table of Contents

Section	Date	Section	Date
Cover Sheet/Table of Contents ✓	9/10/07	LL85101018, Run 2384 ✓	8/22/07
Batch Narrative ✓	9/10/07	SGS 100, Run 2388 ✓	8/23/07
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SGS Logbook pages for this batch ✓	8/20/07 to 8/23/07		
Control Charts for background checks ✓	8/20/07 to 8/23/07		
Control Chart for performance check (100g standard) ✓	8/20/07 to 8/24/07		
SGS 100, Run 2371 ✓	8/20/07		
LL85801034, Run 2373 ✓	8/20/07		
SGS 100, Run 2375 ✓	8/21/07		
LL85101368, Run 2376 ✓	8/21/07		
LL85601657, Run 2377 ✓	8/21/07		
REPLICATE: LL85601657, Run 2378 ✓	8/21/07		
LL85501375, Run 2379 ✓	8/21/07		
SGS 100, Run 2381 ✓	8/22/07		
LL85101655, Run 2382 ✓	8/22/07		
LL85901335, Run 2383 ✓	8/22/07		

[1] SGS Data-Generation-Level Batch Data Report Review, Verification, and Validation Checklist

NDA Batch Narrative

Batch Number: **2007-17**	Status: ~~NOT VALIDATED~~ JW 10.17.07

Quality Control Summary

QC Sample results (daily background check drums and 100-gram standard) were within acceptance criteria established by WIPPs Quality Assurance objectives for TRU Waste characterization.

Replicate Summary

Replicate run was performed on drum LL85401657. Replicate measurement results are acceptable at the 95% confidence level as established by WIPP criteria.

Nonconformances

None Identified.

Technical Supervisor/QA Officer Comments

Background Checks were completed, but electronic data was not saved to print data reports. Background Checks were verified using Control Charts to be sure all Backgrounds were within acceptable limits. Backgrounds show within limits per Control Chart.

Technical Supervisor/QA Officer Printed Name

Signature John Wolf	Date 10.17.07

SGS DATA-GENERATION-LEVEL BATCH DATA REPORT REVIEW, VALIDATION, AND VERIFICATION CHECKLIST

RADIOASSAY BATCH NUMBER: 2007-17 includes the following containers:

LL85801034	LL85101368	LL85401657	LL85501375	LL85101655
LL85901355	LL85101018			
				LL85401657-R replicate

100% of the radioassay data in the Batch Data Report must be reviewed.

Yes/No (Y/N)	**Independent Technical Reviewer Checklist** Initial & date: RJH 9-10-07
Y	The assay measurements are within the system calibration range for the factors of waste matrix, radionuclide identity, and activity.
Y	The Expert Reviewer has evaluated the Batch Data, the review is complete and is documented on the SGS Expert Reviewer Checklists or data reports, as appropriate.
Y	Data are reported in the proper units and correct number of significant figures or more.
Y	☒Calculations have been verified by a valid calculation program (GWAS and/or MGA), and/or ☐I have conducted a spot check of verified calculation programs, and/or ☐I have made a 100% check of all hand calculations. (Mark all that apply.)
Y	I have reviewed the data, including manually input text, for transcription errors or no transcriptions were done. (Check, especially, container identification number, batch number, and gross and tare weights.)
Y	Source transmission for each segment of every measurement is either within the acceptable range or has been accepted by the expert reviewer.
Y	The testing batch QA documentation is complete and includes raw data (including data on electronic storage media and copies of SGS logbook entries for the batch), calculation records (including the printed SGS measurement report, Radioassay Data Sheet, and, if done, the Expert Reviewer's report), references to calibration records (a Count Type of *55 Gallon Galv. Drum*, *Daily 20 g Drum Check*, or *Daily 100 g Drum Check* indicates an acceptable calibration), and QC sample results, namely, a Radioassay Data Sheet for a replicate of an unknown.
Y	QC measurements, namely background and performance checks, were made at the beginning of each counting session in the batch and their records are present.
Y	QC measurement results (background checks and performance checks by measurement of standards) are within established control limits per procedure for SGS operations (OP-B332-005). QC criteria that were not met have been documented with a closed and satisfactorily resolved WCP NCAR or Plutonium Facility CAR.
Y	A replicate count of an unknown has been made once for every batch (which has a maximum of 20 waste containers) or once per week, whichever is more frequent.
Y	Replicate assay QC measurements were properly performed and pass/fail criteria are within established control limits, as calculated below, per procedure WIC 134, and if not, the data have been appropriately qualified.

Let *A1* be the Pu-239 activity from the first replicate count, as recorded on the Radioassay Data Sheet, and *A2* the value from the second replicate count.

Calculate: $D = |A1 - A2| =$ 0.430

Calculate: $s = SQRT[(1.96\ s1)^2 + (1.96\ s2)^2] =$ 2.295

where *1.96 s1* and *1.96 s2* are the 1.96 σ total measurement uncertainties associated with *A1* and *A2*. If $D < s$, the measurement results are the same at the 95% confidence level and the QC measurement passes.

Y I have marked the Passed item on the Radioassay Data Sheet(s) for QC replicates as either Yes or No.

Robert J. Haslett Jr. — Independent Technical Reviewer Signature

9-10-07 — Date

Robert J. Haslett Jr. — Printed Name

SGS DATA-GENERATION-LEVEL BATCH DATA REPORT REVIEW, VALIDATION, AND VERIFICATION CHECKLIST

Yes/No (Y/N)	Technical Supervisor Review Checklist
Y	The data are technically reasonable based on the gamma spectroscopy technique used by the SGS.
Y	All data have received independent technical review.
Y	The testing batch QA documentation is complete and includes raw data, calculation records, references to calibration records, and QC sample results, namely, a replicate of an unknown.
Y	Testing batch data correctly lists the testing facility name, testing batch number, drum numbers included in the batch, and signature releases of radioassay testing personnel.
Y	A table of contents is present.
Y	Background and performance check data and/or control charts for the relevant time period are present.
Y	Separate Radioassay Data Sheets are attached for each waste container. The sheets include information on the method used, Item Description Code (LLNL TRUW Form number or waste stream number), date of examination, total Pu-239 FGEs (g) and associated uncertainty, total alpha activity and associated uncertainty (Ci), TRU activity (nCi/g) and associated uncertainty, listing of individual radioisotopes present (Ci) and associated uncertainties (Ci), thermal power (total decay heat) and associated uncertainty (W), QC replicate (yes/no), and Operator signature / date, expert reviewer (when applicable) signature / date.
N	Actions necessary for release of data: _____

Actions completed: _____ _____

Signature **Date**

_____ 10/17/07

Technical Supervisor Signature **Date**

John Wolf

Printed Name

SGS DATA-GENERATION-LEVEL BATCH DATA REPORT REVIEW, VALIDATION, AND VERIFICATION CHECKLIST

Yes/No/Not Applicable (Y/N/NA)

QA Officer Review Checklist

Y Independent Technical and Technical Supervisory reviews have been performed as evidenced by the appropriate signature releases. *(Write "NA" if this checklist is filled out by the same person who filled out the Technical Supervisor Review Checklist.)*

Y The testing batch QA documentation is complete as appropriate for radioassay, as detailed in the Technical Supervisor checklist. *(Write "NA" if this checklist is filled out by the same person who filled out the Technical Supervisor Review Checklist.)*

Yes/No (Y/N)

Y Additionally, these data validation checklists (Independent Technical Review, Technical Supervisor review, and QA Officer review), when complete, are appended to the Batch Data Report.

Quality Assurance Objectives have been met:

Y The results fall within the ranges for which the Quality Assurance Objectives were verified for the SGS.

Y The MDC has been correctly determined for the waste matrix of this container. (Note that the MDA values for the radionuclides reported on Radioassay Data Sheets have not been corrected for transmission attenuation, unless the expert reviewer has done so and so stated.)

Y The value reported for TRU alpha activity concentration > MDC if the reported value > 100 nCi/g. *(LLW, where the reported concentration ≤ 100 nCi/g, may be reported as ≤ MDC.)* *(In determining TRU alpha activity concentration, any radionuclides measured at ≤ MDC are counted as zero activity or are input, using acceptable knowledge, from known ratios to a nuclide measured at > MDC.)*

[signature] 10/1/10

QA Officer Signature **Date**

John Wolf

Printed Name

SGS DAILY LOGBOOK for WS-7715 in B-332/1377

DATE: 20AUG2007	PAGE 1 of 1	PRIMARY OPERATOR'S NAME/INITIALS: JENNIFER BARRINGTON JB
		SECONDARY OPERATOR(s)'S NAME/INITIALS: DAVE Hiland DH

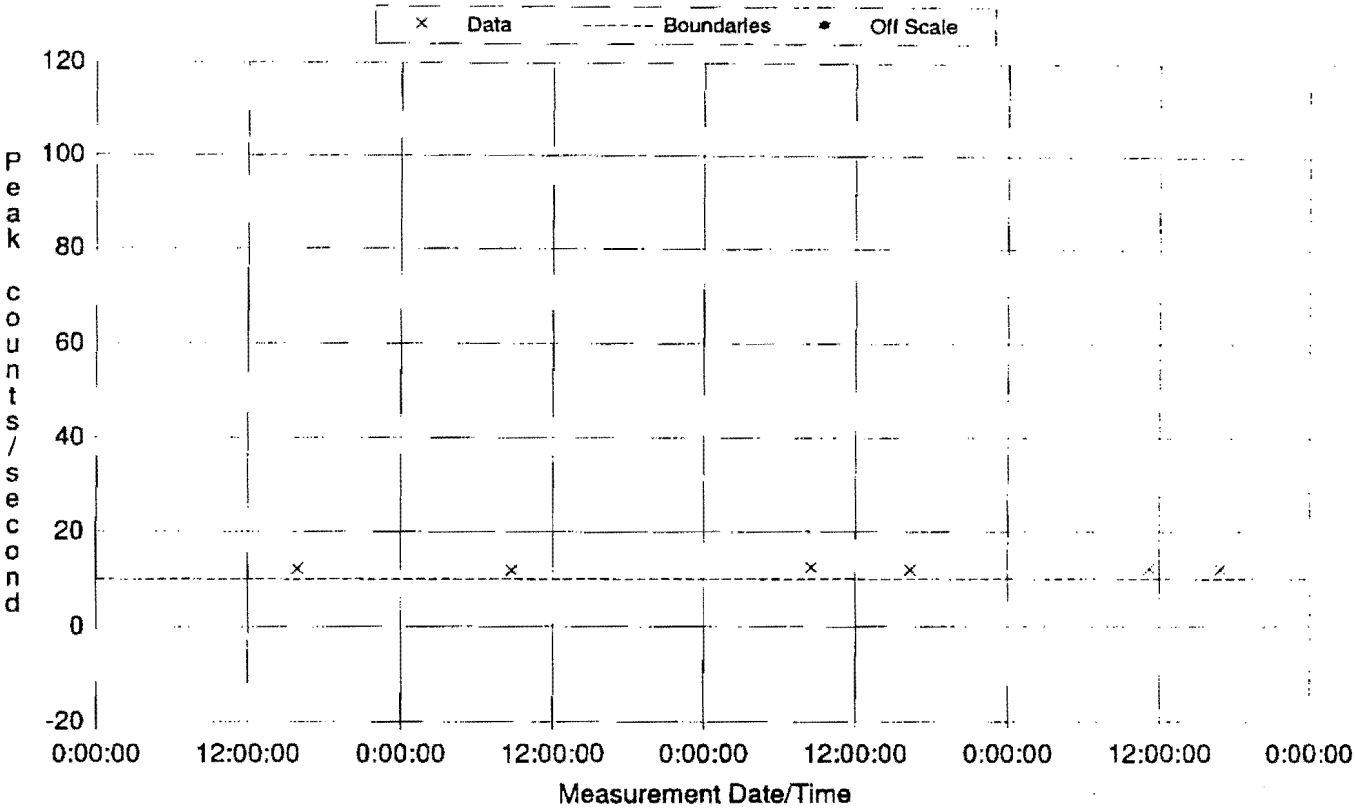
DAILY CHECKS/INITIALS: (Fill in on Page 1 only) — Daily Room Check complete JB, Daily Scales Check complete JB, Date/Time Dewars last filled 8-20-07 *** 0040

START TIME	END TIME	DRUM ID *	OPER.	Verifer **	SEQ. #	BATCH #	DRUM GROSS WT	COMMENTS
1014	1168	SGS100	JB	N/A	2371	2007-17	54.0 kg	ok
								STARTS 2007-17
1548	1553	BCK	JB	N/A	2372	2007-17	N/A	ok
1609	1704	LL85801034	JB	DH	2373	2007-17	69.2 kg	ok

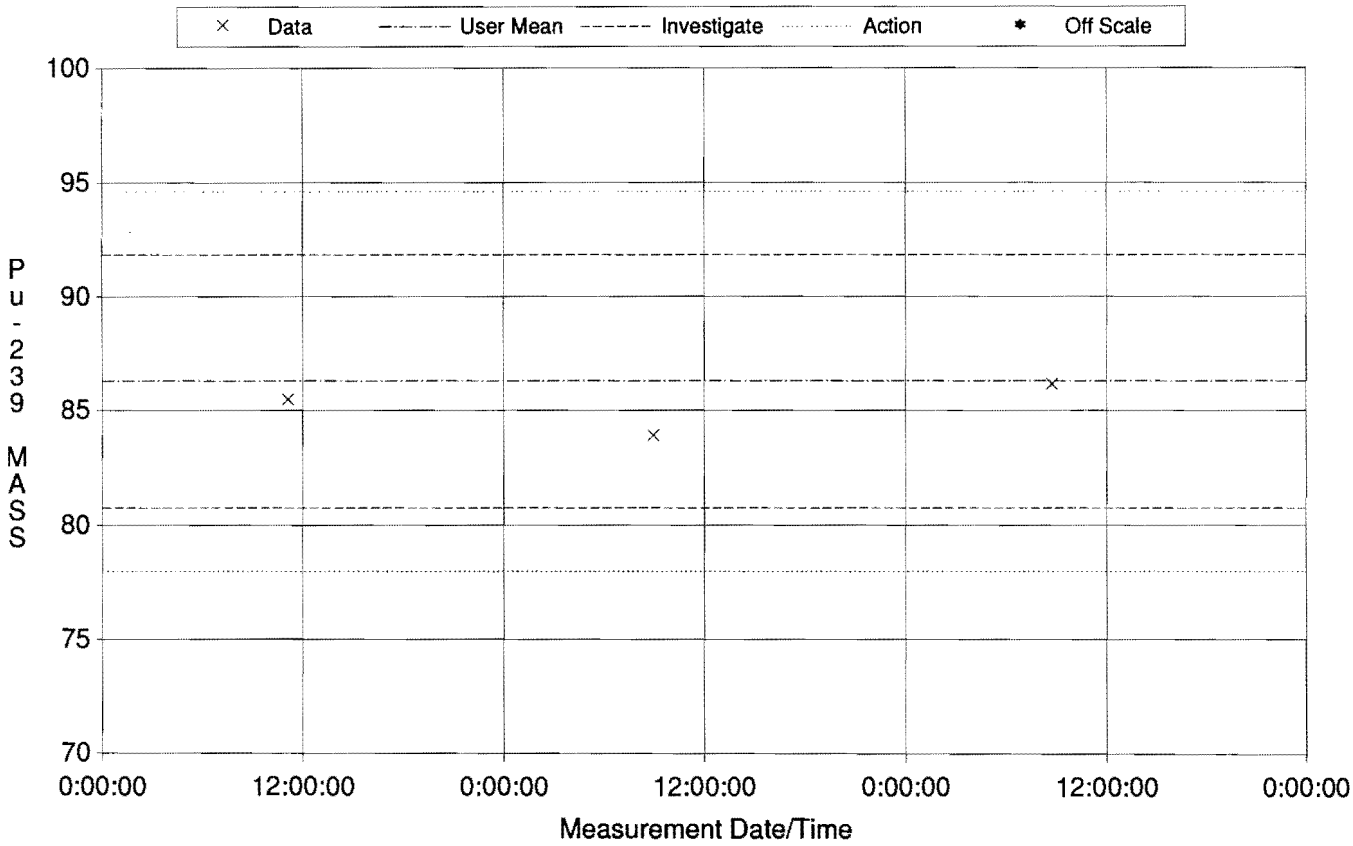
NOTES: * Options are: BCK (Backround), S100g (Standard), or Waste Drum No. (Omit "TRU" on LL drums.) *** Ref: OP-B332-005, Section 9

** Secondary Operator's initials req'd for all waste drums to verify that both the gross and tare wts.are accurate and have been intered into the computer correctly.

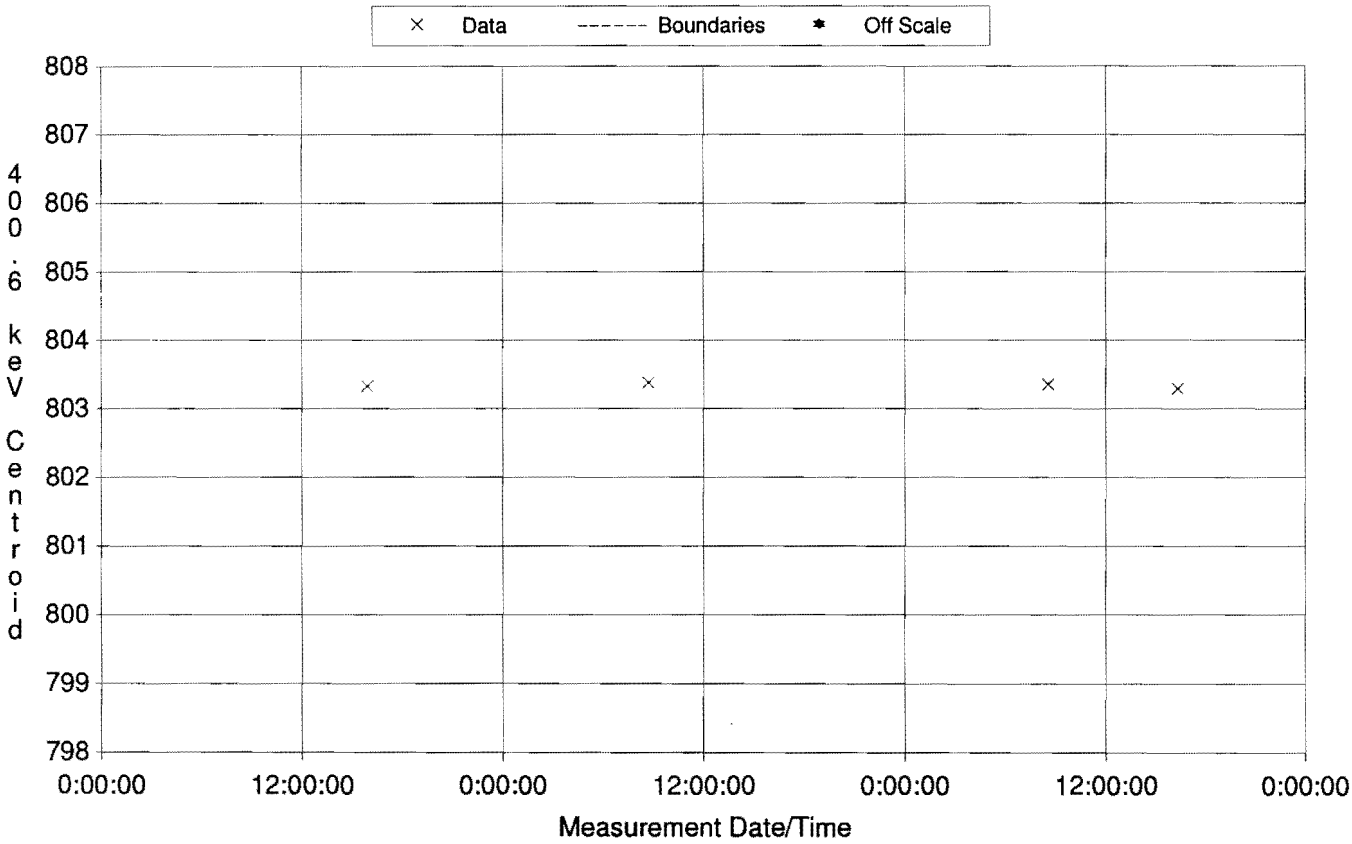
PFWM Review Name/Date: D. Hiland



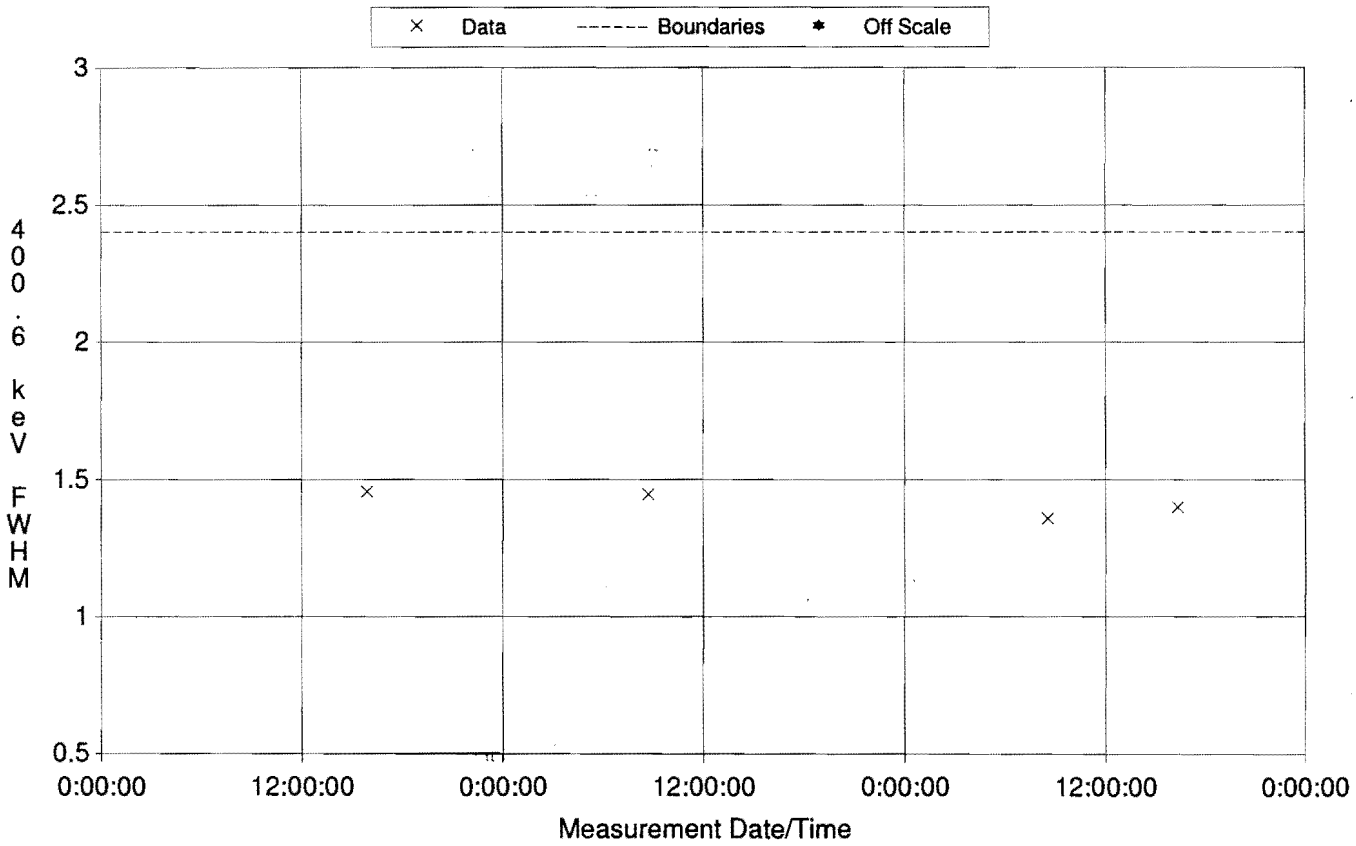
QA Filename : C:\WAS\CTRS\CTR1\ARR1\T11_BCK.QAF
Parameter Description : Peak counts/second (cps)
Selection Dates : 8-20-07 12:00:00 AM - 8-24-07 12:00:00 AM
Lower/Upper Boundaries : 10.000 - 100.000



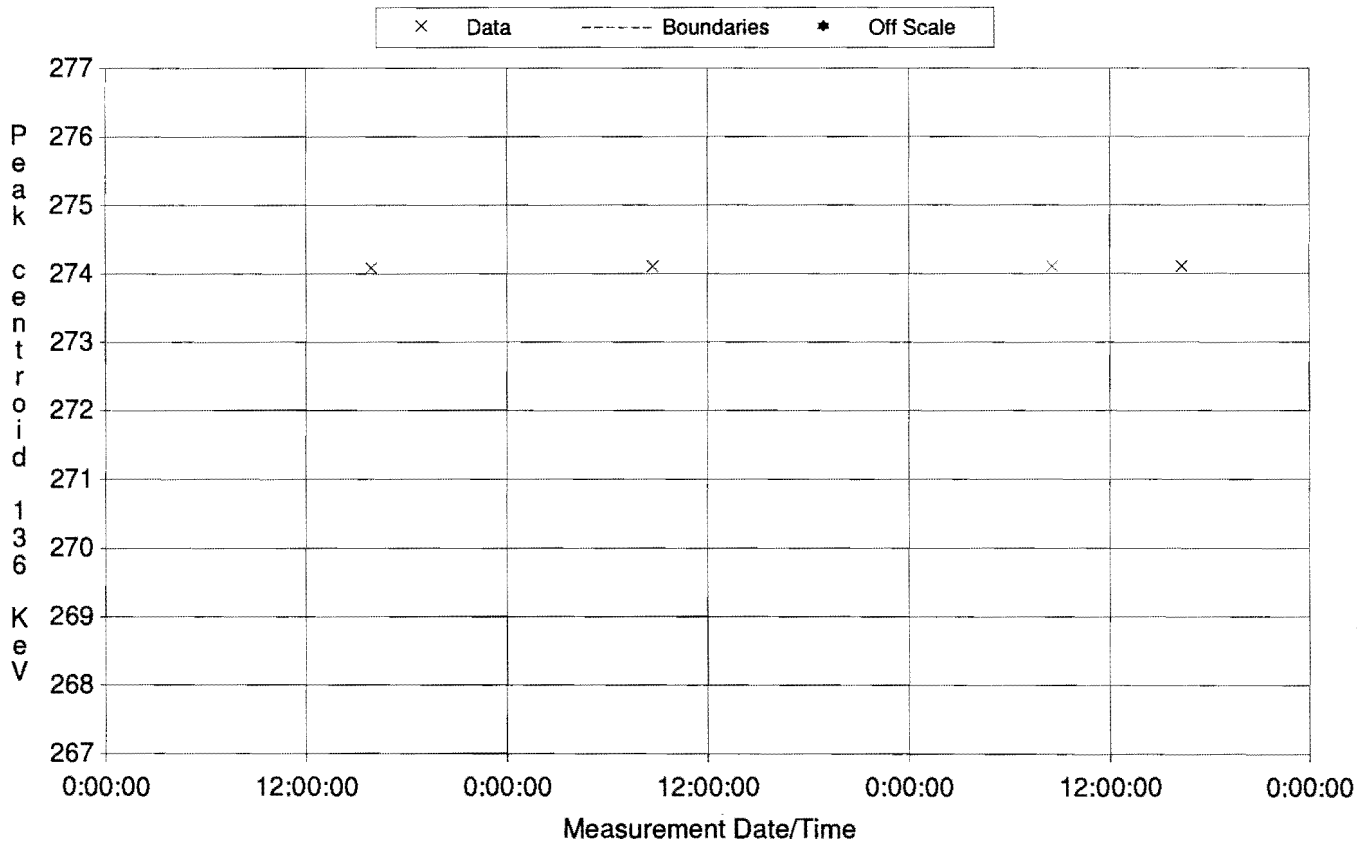
QA Filename : C:\WAS\CTRS\CTR1\ARR1\A05_CAL.QAF
Parameter Description : Pu-239 MASS (grams)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
User Mean +-Std Dev : 86.280 +- 2.77e+00



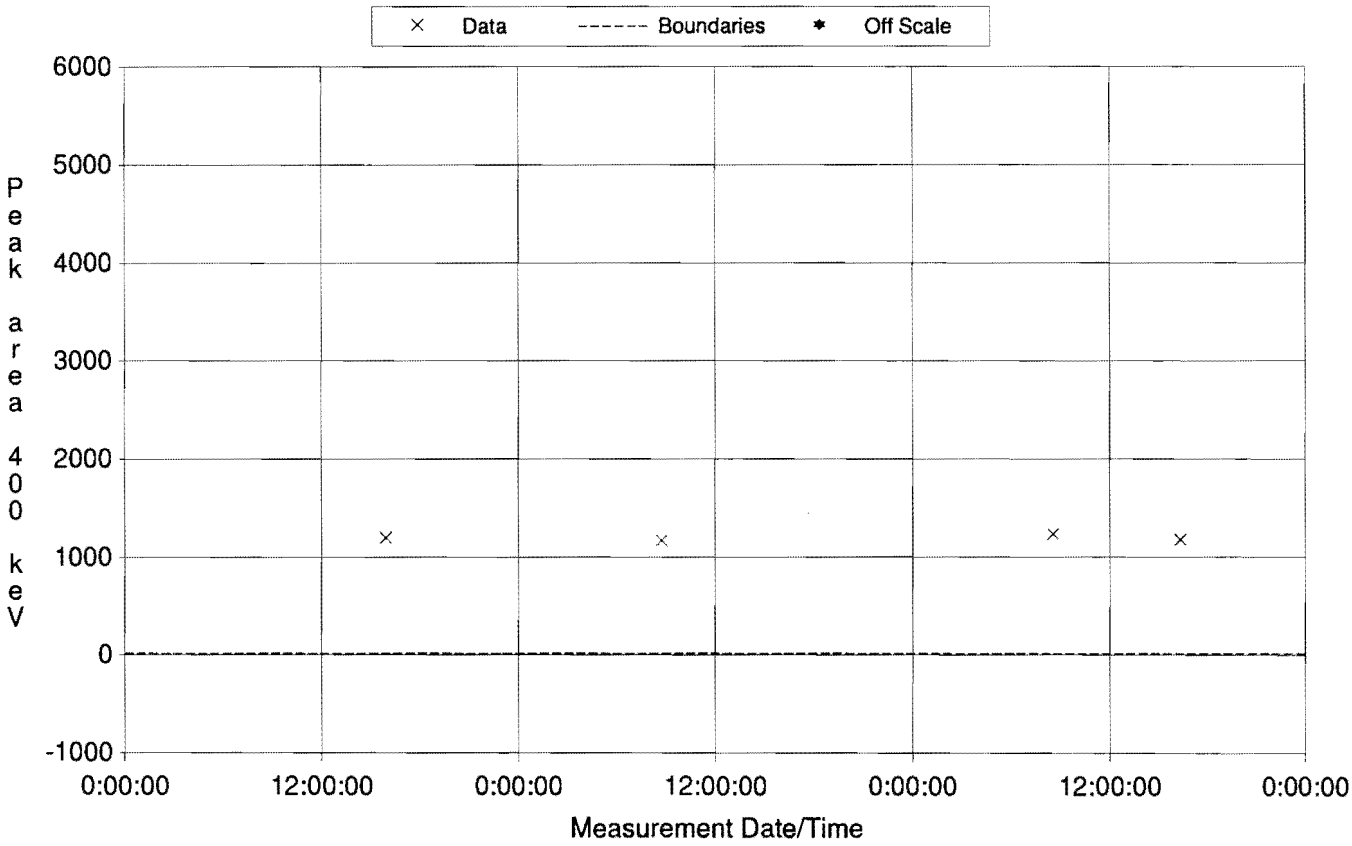
QA Filename : C:\WAS\CTRS\CTR1\ARR1\T11_BCK.QAF
Parameter Description : 400.6 keV Centroid (ch)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 800.000 - 806.000



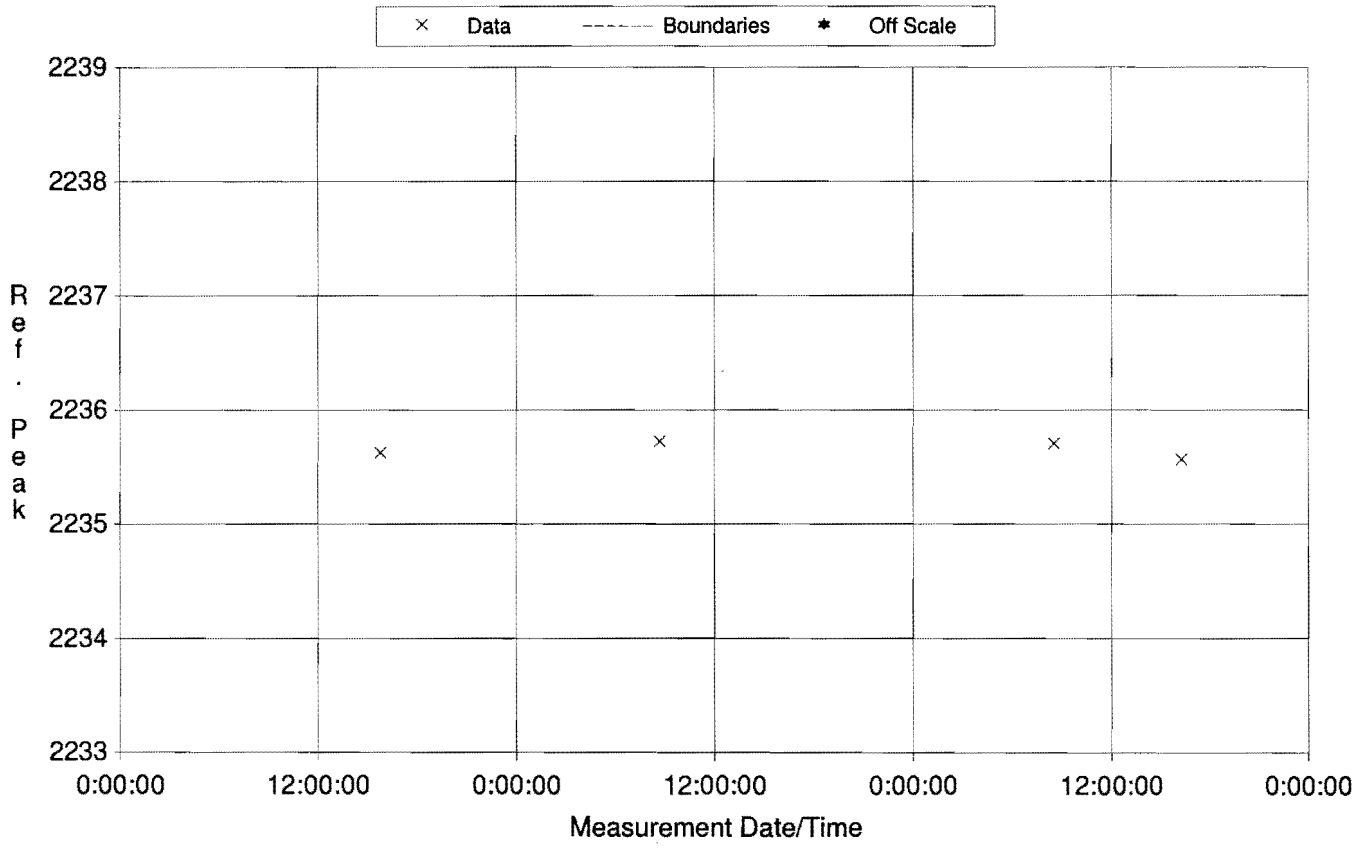
QA Filename : C:\WAS\CTRS\CTR1\ARR1\T11_BCK.QAF
Parameter Description : 400.6 keV FWHM (keV)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 1.000 - 2.400



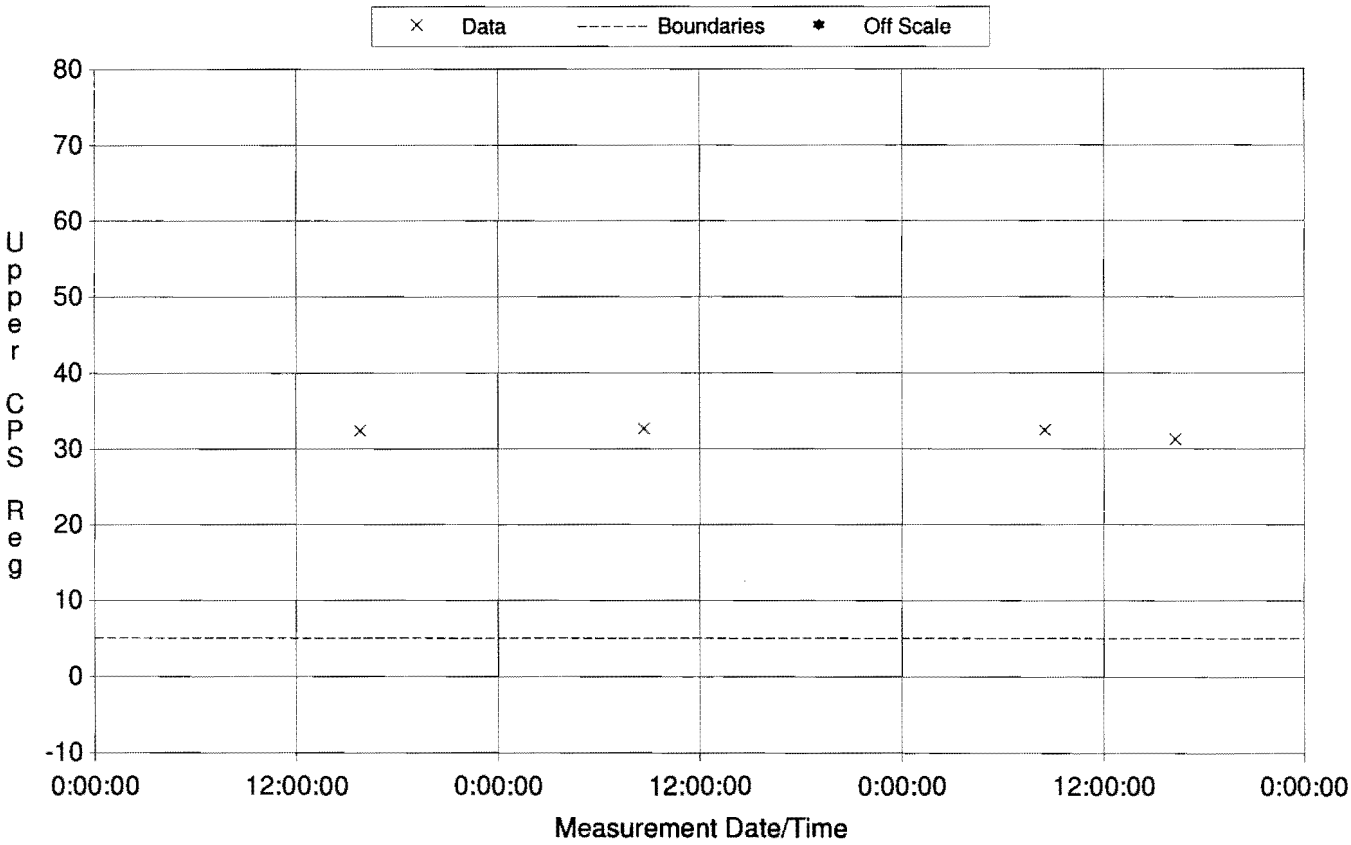
QA Filename : C:\WAS\CTRS\CTR1\ARR1\T11_BCK.QAF
Parameter Description : Peak centroid 136 KeV (ch)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 269.000 - 275.000



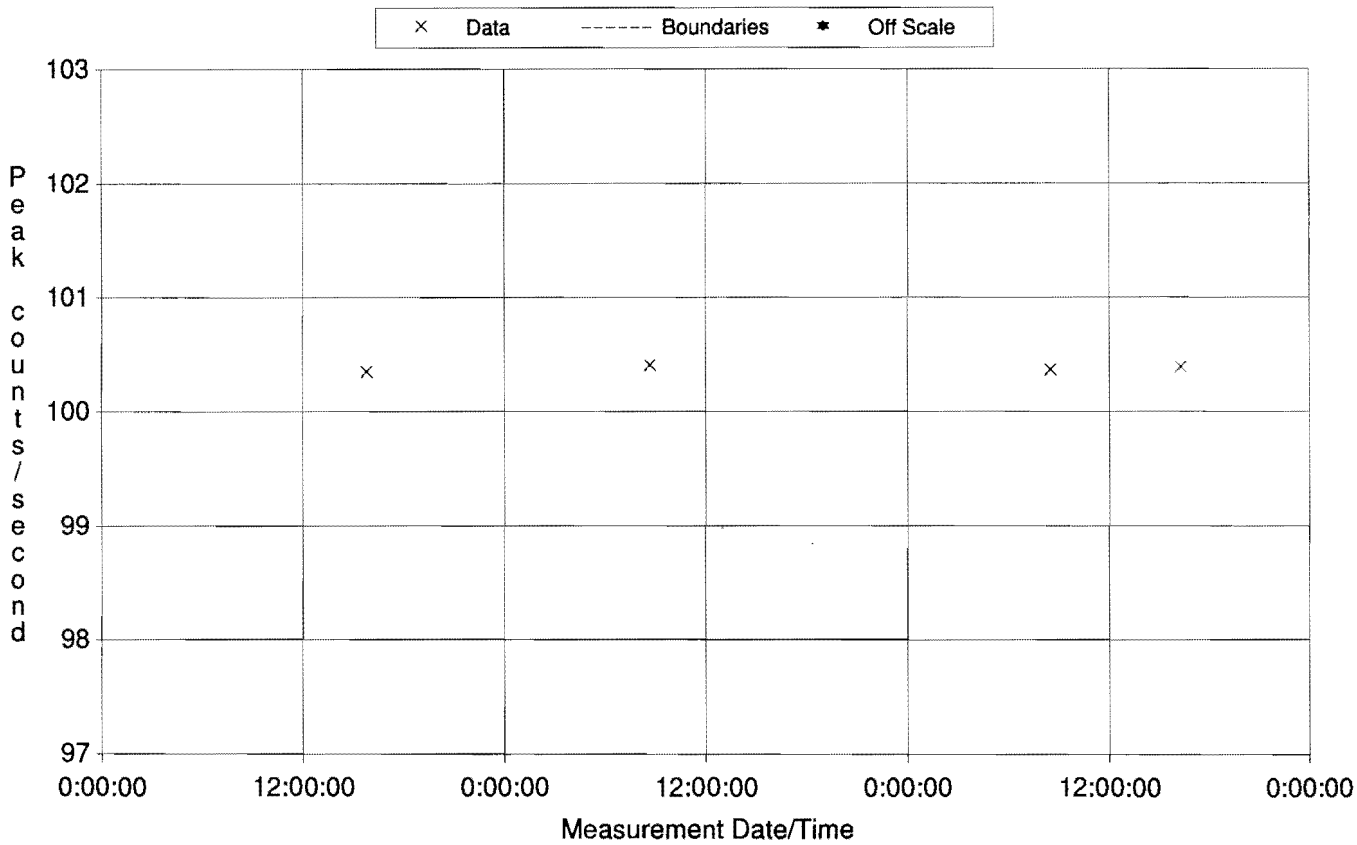
QA Filename : C:\WAS\CTRS\CTR1\ARR1\T11_BCK.QAF
Parameter Description : Peak area 400 keV (counts)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 10.000 - 5000.000



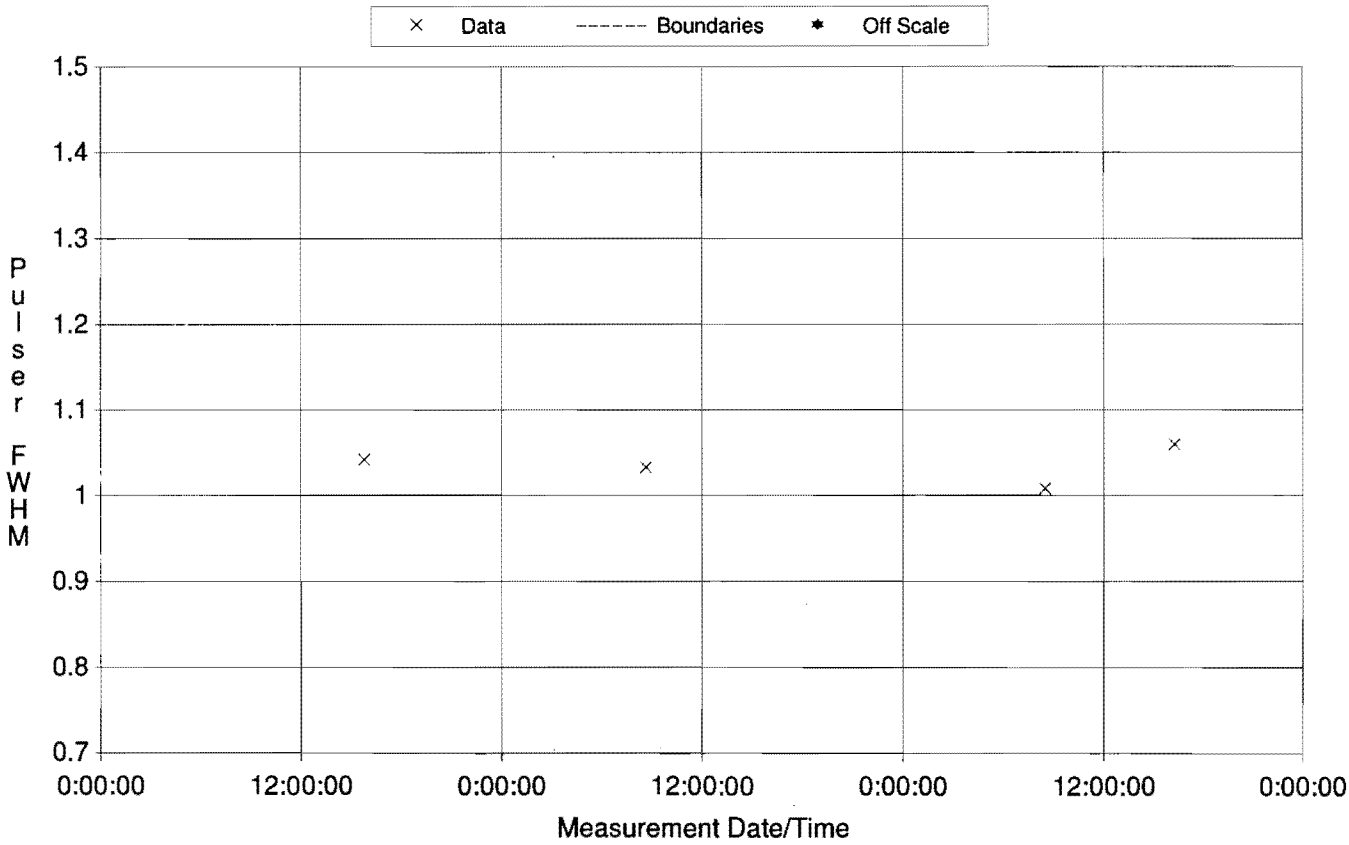
QA Filename : C:\WAS\CTRS\CTR1\ARR1\S11_BCK.QAF
Parameter Description : Ref. Peak (keV)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 2234.000 - 2238.000



QA Filename : C:\WAS\CTRS\CTR1\ARR1\S11_BCK.QAF
Parameter Description : Upper CPS Reg (cps)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 5.000 - 60.000



QA Filename : C:\WAS\CTRS\CTR1\ARR1\S11_BCK.QAF
Parameter Description : Peak counts/second (cps)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 98.000 - 102.000



QA Filename : C:\WAS\CTRS\CTR1\ARR1\S11_BCK.QAF
Parameter Description : Pulser FWHM (keV)
Selection Dates : 8-20-07 12:00:00 AM - 8-23-07 12:00:00 AM
Lower/Upper Boundaries : 0.900 - 1.400

Radioassay Data Sheet — Mon Aug 20 01:55:07 2007
Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: S100-2371	Gross Weight (kg)	: 54.0
Sequence Number	: 2371	Fill Height (%)	: 100.0
Assay Date	: 08/20/07 11:08:00	Density (g/cc)	: 0.11
		Net Weight (kg)	: 22.20
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	4.02e-04	+/-	4.91e-05 Ci/g
Total Pu-239 Equiv Activity:	9.30e+00	+/-	1.09e+00 Ci
Total Pu-239 Fissile Gram Equiv:	9.86e+01	+/-	1.68e+01 g
Decay Heat:	2.85e-01	+/-	3.44e-02 W
Total Pu Mass:	1.04e+02	+/-	1.68e+01 g
TMU:	17.09%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	8.11e-03	6.80e+00
Pu-239	9.42e+01	4.75e-02
Pu-240	5.59e+00	7.94e-01
Pu-241	1.84e-01	6.28e-01
Pu-242	3.08e-02	1.00e+01
Am-241	4.93e-01	4.40e-01
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	8.45e-03	1.55e-03	1.45e-01	2.66e-02	3.05e-03
Pu-239	9.81e+01	1.68e+01	6.08e+00	1.04e+00	3.32e-01
Pu-240	5.82e+00	9.96e-01	1.32e+00	2.26e-01	0.00e+00
Pu-241	1.92e-01	3.28e-02	1.98e+01	3.39e+00	5.80e-03
Pu-242	3.21e-02	6.36e-03	1.26e-04	2.50e-05	0.00e+00
Am-241	4.03e-01	6.76e-02	1.38e+00	2.31e-01	6.71e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	1.34e-02	2.31e-03	9.44e-06	1.63e-06	1.53e-03
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	3.31e-01
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.80e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	3.19e+00
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: S100-2371
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2371
Assayed on: 08/20/07 11:08:00
Report Generated: 08/20/07 13:54:52
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

REVIEW Pu-240 Wt Pct +2 Sigma error <5.68> less than <5.87> Review MGA Resu
Pu-240 Wt Pct error <0.79> is within limits
Pu-238 Wt Pct error <6.80> is within limits
REVIEW QFIT <1.31> > <1.20> Review MGA Results

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.107> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.35e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <1.52> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <1.90> is acceptable in Segment 2
Pulser value <1.00> is within range in Segment 2
DEAD TIME percentage <4.23> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <14.23> is acceptable in Segment 4
Pulser value <1.01> is within range in Segment 4
DEAD TIME percentage <26.93> is acceptable in Segment 5
REVIEW Pulser value <0.98> out of range in Segment 5
DEAD TIME percentage <26.75> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <17.09> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <6.15> is acceptable in Segment 8
Pulser value <1.01> is within range in Segment 8
DEAD TIME percentage <2.05> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <1.50> is acceptable in Segment 10
Pulser value <1.00> is within range in Segment 10
DEAD TIME percentage <1.29> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.06> is acceptable in Segment 12
Pulser value <1.00> is within range in Segment 12
DEAD TIME percentage <0.88> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.75> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.70> is acceptable in Segment 15
Pulser value <0.98> is within range in Segment 15
DEAD TIME percentage <0.69> is acceptable in Segment 16
Pulser value <1.00> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
REVIEW Fiducial Transmission Line <400.645996> < <0.01> found in Segment 5
REVIEW Low Transmission Line <279.528015> < <0.001> found in Segment 6
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

REVIEW Reduced chi squared fit value <7.24e+00> exceeds limit <3.00> for energy peak <129.98> in Segment 4
REVIEW Reduced chi squared fit value <1.55e+01> exceeds limit <3.00> for energy peak <129.93> in Segment 5
REVIEW Reduced chi squared fit value <1.01e+01> exceeds limit <3.00> for energy peak <129.93> in Segment 6
REVIEW Reduced chi squared fit value <3.58e+00> exceeds limit <3.00> for energy peak <662.94> in Segment 6
REVIEW Reduced chi squared fit value <7.37e+00> exceeds limit <3.00> for energy peak <129.96> in Segment 7

Section 7 - FGE MASS REVIEW

REVIEW FGE Mass <115.40> > <110.00>

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <243.47> is above lower limit <200.00>
Np-237 ratio <7320.67> is above lower limit <125.00>

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <98.07> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed

Independent Reviewer:_____Date:_____

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: S100-2371
Item Description Code:
Sequence Number: 2371
Assayed on: 08/20/07 11:08:00
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA Pu-240 Wt Pct +2 Sigma error is less than lower limit. QFIT is greater than upper limit.	
SECTION 4 - PULSER Pulser value out of range in Segment 5	
SECTION 5 - TRANSMISSION Low Transmission Line 279.5 less than 0.001 found in Segment 6 Fiducial Transmission Line less than 0.01 found in Segment 5	
SECTION 6 - REDUCED CHI SQUARED FIT Chi square failure for 130.0 Kev in Segment 4 Chi square failure for 129.9 Kev in Segment 5 Chi square failure for 129.9 Kev in Segment 6 Chi square failure for 662.9 Kev in Segment 6 Chi square failure for 130.0 Kev in Segment 7	
SECTION 7 - FGE MASS FGE Mass is greater than upper limit.	
SECTION 9 - IDC COUNT TYPE IDC is not available.	

Technical Reviewer: _____ Date: _____

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*************************************************************************
*****                        M G A   R E P O R T                    *****
*************************************************************************
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Report generated on: 8-20-07 12:04:33 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202371.CNF Sens : 30.0% LT: 46.5 Mins DT: 16.77
Measurement date: 8-20-07 Declared date: 8-20-07

Sample ID: S100-2371 Detector: Total counts: 1.302E+07

Pu g/cm2 = 0.8150 Cd g/cm2 = 1.7884 FWHM at 122 keV = 619 eV
QFIT = 1.31 FWHM at 208 keV = 791 eV
NQFIT = 1.01

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000086	6.8	6.8	0.0441	6.8	0.00811	6.80	0.00811	6.80
Pu-239	1.000000	0.0	0.4	511.9578	0.6	94.18541	0.05	94.18541	0.05
Pu-240	0.059369	0.8	0.8	30.3944	0.9	5.59169	0.79	5.59169	0.79
Pu-241	0.001953	0.6	0.6	1.0000	0.0	0.18397	0.63	0.18397	0.63
Pu-242	(New alg.	)		0.1675	(10)	0.03082	(10)	0.03082	(10)
Am-241	0.005236	0.5	0.3	2.6807	0.6	0.49316	0.44	0.49316	0.44

Pu-240 effective (meas. date) = 5.664 +/- 0.86%
Am-241 separated about 26.978 +/- 0.145 years ago
Am/Pu-241 weight ratio = 2.68066 +/- 0.64%

Messages :

Lead x-rays detected.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102371.S11
Sample ID: S100-2371 Count Sequence Number: 2371
Assay Start: 8-20-07 11:08:02 AM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 54000.0 g Net: 22200.0 g
Density: 0.107 g /ml

Container Type: 55 Gal Galv
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: Daily 100g Drum Check
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 4:21:04 PM 70097

Reviewed by: _____ Date: _____

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 113.25 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.417 +/- 0.0183
SE-75	264.65	0.000 +/- 0.0000	0.491 +/- 0.0151
SE-75	279.53	0.000 +/- 0.0000	0.538 +/- 0.0245
SE-75	400.65	0.000 +/- 0.0000	0.574 +/- 0.0321

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.87	6.33E-01 +/- 1.74E-01	1.79E+00	4.16E-10 +/- 2.98E-09
2	49.16	2.87E+00 +/- 5.22E-01	1.54E+00	6.73E-07 +/- 2.04E-06
3	59.71	9.57E+00 +/- 5.74E-01	1.48E+00	5.90E-06 +/- 1.11E-05
4	67.75	1.08E+00 +/- 4.68E-01	1.46E+00	1.77E-05 +/- 2.33E-05
5	393.69	1.25E-01 +/- 7.22E-02	1.23E+00	2.14E-04 +/- 1.43E-05
6	400.66	8.31E-02 +/- 5.77E-02	1.23E+00	2.10E-04 +/- 1.43E-05
7	511.85	2.08E-01 +/- 5.50E-02	1.20E+00	1.62E-04 +/- 1.31E-05
8	1085.91	1.74E-02 +/- 1.23E-02	1.13E+00	8.64E-05 +/- 4.52E-06
9	1112.12	1.74E-02 +/- 1.23E-02	1.13E+00	8.48E-05 +/- 4.39E-06
10	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 112.82 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.445 +/- 0.0208
SE-75	264.65	0.000 +/- 0.0000	0.605 +/- 0.0174
SE-75	279.53	0.000 +/- 0.0000	0.603 +/- 0.0244
SE-75	400.65	0.000 +/- 0.0000	0.629 +/- 0.0356

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.17	2.35E+00 +/- 2.76E-01	1.72E+00	1.91E-05 +/- 1.18E-04
2	60.03	1.60E+01 +/- 7.16E-01	1.44E+00	1.32E-04 +/- 2.14E-04
3	129.29	7.87E-01 +/- 5.04E-01	1.34E+00	3.88E-04 +/- 2.47E-05
4	279.54	7.47E-01 +/- 3.82E-01	1.20E+00	3.82E-04 +/- 2.14E-05
5	413.70	1.43E-01 +/- 8.75E-02	1.18E+00	2.89E-04 +/- 1.85E-05
6	511.56	2.00E-01 +/- 8.72E-02	1.17E+00	2.38E-04 +/- 1.72E-05
7	867.39	4.17E-02 +/- 3.58E-02	1.12E+00	1.44E-04 +/- 6.91E-06
8	1001.03	4.19E-02 +/- 2.86E-02	1.11E+00	1.28E-04 +/- 5.83E-06
9	1112.12	1.78E-02 +/- 1.26E-02	1.11E+00	1.18E-04 +/- 5.17E-06
10	1408.01	2.67E-02 +/- 2.10E-02	1.09E+00	1.02E-04 +/- 6.88E-06
11	1461.69	8.00E-02 +/- 3.22E-02	1.09E+00	1.00E-04 +/- 8.23E-06
12	2236.00	1.00E+02 +/- 1.51E+00	1.08E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 110.14 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.391 +/- 0.0232
SE-75	264.65	0.000 +/- 0.0000	0.530 +/- 0.0178
SE-75	279.53	0.000 +/- 0.0000	0.537 +/- 0.0277
SE-75	400.65	0.000 +/- 0.0000	0.571 +/- 0.0426

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.12	4.79E+00 +/- 4.45E-01	1.85E+00	3.50E-06 +/- 3.34E-06
	2	60.17	7.11E+01 +/- 1.45E+00	1.52E+00	8.08E-05 +/- 2.79E-05
	3	99.41	2.75E+01 +/- 1.44E+00	1.43E+00	2.97E-04 +/- 3.03E-05
	4	111.68	6.70E+00 +/- 1.08E+00	1.42E+00	3.54E-04 +/- 2.60E-05
M	5	126.00	4.11E+00 +/- 3.94E-01	1.41E+00	4.08E-04 +/- 2.26E-05
m	6	130.02	2.40E+01 +/- 9.45E-01	1.40E+00	4.20E-04 +/- 2.22E-05
	7	148.57	2.61E+00 +/- 7.99E-01	1.38E+00	4.63E-04 +/- 2.25E-05
	8	208.67	1.49E+01 +/- 8.33E-01	1.31E+00	4.92E-04 +/- 2.59E-05
	9	268.27	9.44E-01 +/- 7.17E-01	1.26E+00	4.47E-04 +/- 2.17E-05
	10	279.54	7.22E-01 +/- 4.55E-01	1.25E+00	4.36E-04 +/- 2.07E-05
	11	300.10	9.96E-01 +/- 5.53E-01	1.25E+00	4.16E-04 +/- 1.88E-05
	12	311.90	6.90E-01 +/- 4.05E-01	1.25E+00	4.04E-04 +/- 1.79E-05
M	13	321.40	6.09E-01 +/- 2.26E-01	1.24E+00	3.95E-04 +/- 1.72E-05
m	14	324.08	9.23E-01 +/- 2.78E-01	1.24E+00	3.93E-04 +/- 1.70E-05
M	15	333.43	6.72E+00 +/- 4.70E-01	1.24E+00	3.84E-04 +/- 1.63E-05
m	16	336.26	2.39E+00 +/- 2.53E-01	1.24E+00	3.81E-04 +/- 1.61E-05
	17	345.64	4.61E+00 +/- 4.32E-01	1.24E+00	3.73E-04 +/- 1.56E-05
	18	368.87	1.83E+00 +/- 3.78E-01	1.23E+00	3.52E-04 +/- 1.44E-05
	19	375.66	9.82E+00 +/- 6.43E-01	1.23E+00	3.46E-04 +/- 1.41E-05
M	20	380.81	2.86E+00 +/- 2.65E-01	1.23E+00	3.42E-04 +/- 1.38E-05
m	21	383.41	2.88E+00 +/- 2.63E-01	1.23E+00	3.40E-04 +/- 1.37E-05
	22	393.55	6.09E+00 +/- 3.48E-01	1.23E+00	3.32E-04 +/- 1.34E-05
	23	413.70	1.61E+01 +/- 4.57E-01	1.22E+00	3.16E-04 +/- 1.28E-05
	24	423.18	1.11E+00 +/- 1.48E-01	1.22E+00	3.09E-04 +/- 1.26E-05
	25	443.98	1.89E-01 +/- 1.07E-01	1.22E+00	2.95E-04 +/- 1.21E-05
	26	452.10	1.87E+00 +/- 1.83E-01	1.22E+00	2.89E-04 +/- 1.20E-05
	27	559.60	8.43E-02 +/- 4.84E-02	1.19E+00	2.32E-04 +/- 1.08E-05
	28	662.42	9.24E-01 +/- 1.14E-01	1.18E+00	1.95E-04 +/- 9.62E-06
	29	722.01	2.85E-01 +/- 6.99E-02	1.17E+00	1.79E-04 +/- 8.87E-06
	30	852.68	6.52E-02 +/- 2.66E-02	1.15E+00	1.53E-04 +/- 7.12E-06
	31	964.13	3.86E-02 +/- 2.76E-02	1.14E+00	1.39E-04 +/- 5.75E-06
	32	2236.00	1.00E+02 +/- 1.52E+00	1.09E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 98.63 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.262 +/- 0.0329
SE-75	264.65	0.000 +/- 0.0000	0.591 +/- 0.0237
SE-75	279.53	0.000 +/- 0.0000	0.526 +/- 0.0380
SE-75	400.65	0.000 +/- 0.0000	0.618 +/- 0.0515

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.07	1.59E+01 +/- 8.61E-01	2.31E+00	1.19E-07 +/- 7.27E-07
	2	50.13	6.85E+00 +/- 1.68E+00	1.87E+00	1.07E-05 +/- 2.68E-05
	3	60.17	4.40E+02 +/- 6.08E+00	1.78E+00	3.62E-05 +/- 5.76E-05
	4	99.39	1.74E+02 +/- 3.72E+00	1.65E+00	2.64E-04 +/- 6.33E-05
	5	111.69	3.91E+01 +/- 2.16E+00	1.63E+00	3.35E-04 +/- 3.62E-05
	6	116.32	1.92E+01 +/- 2.88E+00	1.62E+00	3.58E-04 +/- 2.82E-05
M	7	125.95	2.25E+01 +/- 8.41E-01	1.61E+00	3.99E-04 +/- 2.37E-05
m	8	129.98	1.59E+02 +/- 2.92E+00	1.60E+00	4.14E-04 +/- 2.68E-05
	9	148.57	2.01E+01 +/- 1.28E+00	1.53E+00	4.63E-04 +/- 4.66E-05
	10	165.29	2.19E+00 +/- 1.06E+00	1.47E+00	4.84E-04 +/- 5.63E-05
	11	172.05	6.37E+00 +/- 1.50E+00	1.44E+00	4.88E-04 +/- 5.77E-05
	12	179.74	3.23E+00 +/- 8.93E-01	1.42E+00	4.90E-04 +/- 5.79E-05
	13	189.93	4.47E+00 +/- 9.69E-01	1.38E+00	4.89E-04 +/- 5.65E-05
	14	196.25	7.10E+00 +/- 1.03E+00	1.37E+00	4.87E-04 +/- 5.48E-05
	15	208.65	9.80E+01 +/- 2.20E+00	1.33E+00	4.80E-04 +/- 5.05E-05
	16	244.70	3.15E+00 +/- 9.74E-01	1.25E+00	4.48E-04 +/- 3.50E-05
	17	256.05	6.09E+00 +/- 8.96E-01	1.23E+00	4.36E-04 +/- 3.06E-05
M	18	264.61	2.35E+00 +/- 4.13E-01	1.21E+00	4.27E-04 +/- 2.75E-05
m	19	268.27	4.81E+00 +/- 6.07E-01	1.22E+00	4.23E-04 +/- 2.63E-05
	20	279.54	1.29E+00 +/- 5.21E-01	1.26E+00	4.11E-04 +/- 2.31E-05
	21	298.06	3.14E+00 +/- 9.99E-01	1.25E+00	3.91E-04 +/- 1.92E-05
	22	311.90	5.99E+00 +/- 8.17E-01	1.24E+00	3.77E-04 +/- 1.75E-05
M	23	321.67	4.66E+00 +/- 5.96E-01	1.24E+00	3.68E-04 +/- 1.69E-05
m	24	323.97	5.39E+00 +/- 6.08E-01	1.24E+00	3.66E-04 +/- 1.68E-05
M	25	333.35	4.54E+01 +/- 1.21E+00	1.23E+00	3.57E-04 +/- 1.65E-05
m	26	336.31	1.82E+01 +/- 6.29E-01	1.23E+00	3.54E-04 +/- 1.65E-05
	27	345.65	1.95E+01 +/- 1.49E+00	1.22E+00	3.46E-04 +/- 1.65E-05
	28	375.66	7.17E+01 +/- 1.73E+00	1.21E+00	3.21E-04 +/- 1.71E-05
M	29	380.79	1.60E+01 +/- 6.54E-01	1.20E+00	3.17E-04 +/- 1.72E-05
m	30	383.39	1.74E+01 +/- 6.68E-01	1.20E+00	3.15E-04 +/- 1.73E-05
	31	393.50	3.60E+01 +/- 9.05E-01	1.20E+00	3.08E-04 +/- 1.75E-05
	32	413.70	9.68E+01 +/- 1.61E+00	1.19E+00	2.94E-04 +/- 1.78E-05
	33	423.16	5.63E+00 +/- 4.42E-01	1.19E+00	2.87E-04 +/- 1.79E-05
	34	446.38	4.98E-01 +/- 2.95E-01	1.18E+00	2.73E-04 +/- 1.78E-05
	35	452.05	1.08E+01 +/- 4.63E-01	1.18E+00	2.70E-04 +/- 1.78E-05
	36	619.38	1.08E+00 +/- 1.68E-01	1.16E+00	2.02E-04 +/- 1.27E-05
	37	633.66	1.23E-01 +/- 8.23E-02	1.15E+00	1.98E-04 +/- 1.22E-05
	38	646.42	3.83E-01 +/- 1.38E-01	1.15E+00	1.94E-04 +/- 1.18E-05
	39	653.41	2.98E-01 +/- 1.61E-01	1.15E+00	1.93E-04 +/- 1.16E-05

M 40	659.45	3.62E-01	+/-	8.09E-02	1.15E+00	1.91E-04	+/-	1.14E-05
m 41	663.00	4.75E+00	+/-	3.57E-01	1.15E+00	1.90E-04	+/-	1.13E-05
42	689.30	3.88E-01	+/-	1.04E-01	1.15E+00	1.84E-04	+/-	1.05E-05

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	722.01	2.47E+00 +/- 1.81E-01	1.14E+00	1.77E-04 +/- 9.59E-06
44	756.95	1.29E-01 +/- 6.72E-02	1.14E+00	1.70E-04 +/- 8.81E-06
45	769.97	5.86E-01 +/- 9.59E-02	1.14E+00	1.68E-04 +/- 8.56E-06
46	1001.03	4.33E-02 +/- 3.56E-02	1.12E+00	1.37E-04 +/- 6.33E-06
47	1408.01	4.11E-02 +/- 2.06E-02	1.10E+00	1.06E-04 +/- 7.05E-06
48	2236.00	1.00E+02 +/- 1.61E+00	1.08E+00	7.00E-05 +/- 3.84E-05
49	2294.91	8.27E-02 +/- 3.68E-02	1.08E+00	6.80E-05 +/- 4.07E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 84.03 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.290 +/- 0.0196
SE-75	279.53	0.000 +/- 0.0000	0.239 +/- 0.0407
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.08	1.68E+01 +/- 9.57E-01	4.10E+00	2.80E-07 +/- 1.84E-06
	2	50.18	1.13E+01 +/- 2.18E+00	4.10E+00	1.62E-05 +/- 4.37E-05
	3	60.15	1.06E+03 +/- 1.44E+01	4.10E+00	4.79E-05 +/- 8.22E-05
	4	78.34	4.38E+00 +/- 1.64E+00	4.10E+00	1.47E-04 +/- 1.11E-04
	5	99.34	3.65E+02 +/- 6.60E+00	4.10E+00	2.77E-04 +/- 7.11E-05
	6	111.66	6.62E+01 +/- 3.21E+00	4.10E+00	3.41E-04 +/- 3.83E-05
	7	116.23	6.93E+01 +/- 4.13E+00	4.10E+00	3.61E-04 +/- 2.90E-05
M	8	125.89	4.77E+01 +/- 1.33E+00	4.10E+00	3.97E-04 +/- 2.36E-05
m	9	129.93	3.31E+02 +/- 5.40E+00	4.10E+00	4.09E-04 +/- 2.72E-05
M	10	144.80	2.27E+01 +/- 9.95E-01	3.10E+00	4.43E-04 +/- 4.48E-05
m	11	146.91	2.05E+01 +/- 9.57E-01	2.99E+00	4.46E-04 +/- 4.69E-05
m	12	149.19	5.11E+01 +/- 1.62E+00	2.88E+00	4.49E-04 +/- 4.89E-05
	13	161.44	6.83E+00 +/- 1.90E+00	2.50E+00	4.62E-04 +/- 5.66E-05
	14	171.99	1.64E+01 +/- 1.98E+00	2.30E+00	4.67E-04 +/- 5.93E-05

	15	179.74	7.98E+00	+/-	1.67E+00	2.18E+00	4.67E-04	+/-	5.93E-05
	16	189.89	8.92E+00	+/-	1.35E+00	2.06E+00	4.65E-04	+/-	5.77E-05
	17	196.22	1.17E+01	+/-	1.46E+00	1.99E+00	4.63E-04	+/-	5.59E-05
	18	208.64	2.07E+02	+/-	3.80E+00	1.88E+00	4.56E-04	+/-	5.12E-05
	19	244.70	3.21E+00	+/-	1.31E+00	1.64E+00	4.25E-04	+/-	3.51E-05
	20	255.99	1.25E+01	+/-	1.19E+00	1.58E+00	4.14E-04	+/-	3.05E-05
M	21	264.61	4.43E+00	+/-	5.53E-01	1.54E+00	4.06E-04	+/-	2.74E-05
m	22	268.06	1.01E+01	+/-	8.67E-01	1.56E+00	4.03E-04	+/-	2.62E-05
M	23	297.95	7.01E+00	+/-	8.02E-01	1.62E+00	3.74E-04	+/-	1.90E-05
m	24	300.69	1.56E+00	+/-	4.07E-01	1.62E+00	3.72E-04	+/-	1.86E-05
	25	311.90	9.10E+00	+/-	1.07E+00	1.61E+00	3.62E-04	+/-	1.74E-05
	26	323.04	1.95E+01	+/-	1.26E+00	1.60E+00	3.52E-04	+/-	1.68E-05
M	27	333.30	8.93E+01	+/-	1.95E+00	1.60E+00	3.43E-04	+/-	1.67E-05
m	28	336.30	3.47E+01	+/-	9.61E-01	1.59E+00	3.41E-04	+/-	1.67E-05
M	29	342.01	2.89E+00	+/-	1.98E-01	1.59E+00	3.36E-04	+/-	1.68E-05
m	30	345.59	7.29E+01	+/-	1.08E+00	1.59E+00	3.34E-04	+/-	1.69E-05
	31	368.77	2.94E+01	+/-	1.17E+00	1.57E+00	3.16E-04	+/-	1.76E-05
	32	375.60	1.37E+02	+/-	2.90E+00	1.56E+00	3.11E-04	+/-	1.79E-05
M	33	380.77	3.52E+01	+/-	1.07E+00	1.56E+00	3.07E-04	+/-	1.81E-05
m	34	383.34	3.34E+01	+/-	1.00E+00	1.56E+00	3.06E-04	+/-	1.82E-05
	35	393.45	7.26E+01	+/-	1.51E+00	1.55E+00	2.99E-04	+/-	1.85E-05
	36	413.70	1.90E+02	+/-	2.95E+00	1.54E+00	2.86E-04	+/-	1.90E-05
	37	446.48	7.52E-01	+/-	3.70E-01	1.52E+00	2.68E-04	+/-	1.91E-05
	38	451.96	2.14E+01	+/-	7.35E-01	1.51E+00	2.65E-04	+/-	1.91E-05
	39	619.40	2.08E+00	+/-	2.47E-01	1.43E+00	2.01E-04	+/-	1.37E-05
	40	633.27	2.06E-01	+/-	1.51E-01	1.43E+00	1.97E-04	+/-	1.32E-05
	41	640.63	6.32E-01	+/-	2.42E-01	1.42E+00	1.95E-04	+/-	1.29E-05
	42	646.47	5.74E-01	+/-	1.97E-01	1.42E+00	1.94E-04	+/-	1.27E-05

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
M	43	659.33	6.75E-01 +/- 1.23E-01	1.42E+00	1.91E-04 +/- 1.22E-05
m	44	662.92	9.32E+00 +/- 5.38E-01	1.41E+00	1.90E-04 +/- 1.21E-05
	45	689.21	1.25E+00 +/- 1.62E-01	1.41E+00	1.84E-04 +/- 1.11E-05
	46	704.22	3.05E-01 +/- 1.04E-01	1.40E+00	1.80E-04 +/- 1.06E-05
	47	722.01	4.34E+00 +/- 2.74E-01	1.39E+00	1.77E-04 +/- 1.01E-05
	48	737.84	1.37E-01 +/- 8.62E-02	1.39E+00	1.73E-04 +/- 9.62E-06
	49	756.76	4.49E-01 +/- 1.12E-01	1.38E+00	1.70E-04 +/- 9.13E-06
	50	769.82	1.09E+00 +/- 1.54E-01	1.38E+00	1.67E-04 +/- 8.82E-06
	51	778.90	1.01E-01 +/- 5.89E-02	1.38E+00	1.66E-04 +/- 8.62E-06
	52	964.13	3.90E-02 +/- 3.34E-02	1.33E+00	1.39E-04 +/- 6.40E-06
	53	1001.03	3.13E-02 +/- 2.89E-02	1.32E+00	1.35E-04 +/- 6.17E-06
	54	1112.12	2.72E-02 +/- 3.87E-02	1.30E+00	1.23E-04 +/- 5.54E-06
	55	2236.00	1.00E+02 +/- 1.70E+00	1.22E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 84.24 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.283 +/- 0.0187
SE-75	279.53	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	400.65	0.000 +/- 0.0000	0.401 +/- 0.0685

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.14	2.98E+01 +/- 1.26E+00	4.10E+00	4.87E-07 +/- 3.04E-06
	2	50.25	1.14E+01 +/- 2.03E+00	4.10E+00	2.23E-05 +/- 5.70E-05
	3	60.15	1.00E+03 +/- 1.38E+01	4.10E+00	6.07E-05 +/- 9.93E-05
	4	99.33	3.62E+02 +/- 6.60E+00	4.10E+00	3.06E-04 +/- 7.51E-05
	5	111.66	7.63E+01 +/- 3.26E+00	4.10E+00	3.68E-04 +/- 4.01E-05
	6	116.30	3.91E+01 +/- 4.31E+00	4.10E+00	3.88E-04 +/- 3.03E-05
M	7	125.92	5.01E+01 +/- 1.37E+00	4.10E+00	4.21E-04 +/- 2.46E-05
m	8	129.93	3.29E+02 +/- 5.40E+00	4.10E+00	4.33E-04 +/- 2.80E-05

	9	144.70	5.92E+00	+/-	1.37E+00	3.12E+00	4.64E-04	+/-	4.48E-05
	10	148.57	3.69E+01	+/-	2.16E+00	2.93E+00	4.69E-04	+/-	4.84E-05
	11	161.51	8.52E+00	+/-	1.90E+00	2.52E+00	4.81E-04	+/-	5.64E-05
	12	172.02	1.50E+01	+/-	2.00E+00	2.31E+00	4.85E-04	+/-	5.88E-05
	13	179.77	5.94E+00	+/-	1.04E+00	2.19E+00	4.85E-04	+/-	5.88E-05
	14	190.01	9.68E+00	+/-	1.37E+00	2.07E+00	4.82E-04	+/-	5.72E-05
	15	196.24	1.40E+01	+/-	1.68E+00	2.00E+00	4.80E-04	+/-	5.54E-05
	16	208.63	2.09E+02	+/-	3.85E+00	1.89E+00	4.72E-04	+/-	5.09E-05
	17	244.70	2.62E+00	+/-	1.33E+00	1.65E+00	4.43E-04	+/-	3.54E-05
	18	255.93	1.47E+01	+/-	1.27E+00	1.60E+00	4.33E-04	+/-	3.10E-05
M	19	264.66	3.30E+00	+/-	5.07E-01	1.55E+00	4.25E-04	+/-	2.79E-05
m	20	268.10	9.69E+00	+/-	8.82E-01	1.55E+00	4.22E-04	+/-	2.67E-05
	21	279.54	1.66E+00	+/-	1.24E+00	1.53E+00	4.11E-04	+/-	2.35E-05
	22	297.99	4.88E+00	+/-	1.11E+00	1.51E+00	3.95E-04	+/-	1.97E-05
	23	311.90	1.22E+01	+/-	9.66E-01	1.49E+00	3.82E-04	+/-	1.81E-05
M	24	321.66	9.21E+00	+/-	8.05E-01	1.47E+00	3.74E-04	+/-	1.75E-05
m	25	324.00	1.18E+01	+/-	8.72E-01	1.47E+00	3.72E-04	+/-	1.74E-05
M	26	333.27	8.79E+01	+/-	1.99E+00	1.46E+00	3.65E-04	+/-	1.73E-05
m	27	336.23	2.91E+01	+/-	9.26E-01	1.46E+00	3.63E-04	+/-	1.73E-05
M	28	342.02	9.14E+00	+/-	5.05E-01	1.45E+00	3.58E-04	+/-	1.74E-05
m	29	345.57	7.89E+01	+/-	1.88E+00	1.45E+00	3.55E-04	+/-	1.74E-05
	30	375.61	1.42E+02	+/-	2.94E+00	1.41E+00	3.34E-04	+/-	1.84E-05
M	31	380.76	3.47E+01	+/-	1.08E+00	1.41E+00	3.30E-04	+/-	1.86E-05
m	32	383.33	3.30E+01	+/-	1.01E+00	1.40E+00	3.28E-04	+/-	1.87E-05
	33	393.46	7.27E+01	+/-	1.52E+00	1.39E+00	3.22E-04	+/-	1.90E-05
	34	413.70	1.94E+02	+/-	3.02E+00	1.38E+00	3.09E-04	+/-	1.95E-05
	35	451.99	2.20E+01	+/-	7.14E-01	1.36E+00	2.88E-04	+/-	1.97E-05
	36	481.76	6.37E-01	+/-	3.07E-01	1.35E+00	2.74E-04	+/-	1.93E-05
	37	598.36	3.32E-01	+/-	1.36E-01	1.31E+00	2.29E-04	+/-	1.52E-05
	38	619.40	1.89E+00	+/-	2.52E-01	1.31E+00	2.22E-04	+/-	1.43E-05
	39	652.88	1.17E+00	+/-	2.28E-01	1.30E+00	2.13E-04	+/-	1.30E-05
M	40	659.33	4.26E-01	+/-	9.46E-02	1.30E+00	2.11E-04	+/-	1.27E-05
m	41	662.94	9.73E+00	+/-	4.06E-01	1.30E+00	2.10E-04	+/-	1.26E-05
	42	689.51	8.16E-01	+/-	1.40E-01	1.29E+00	2.03E-04	+/-	1.16E-05

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	722.01	4.36E+00 +/- 2.71E-01	1.28E+00	1.95E-04 +/- 1.05E-05
44	737.73	1.81E-01 +/- 1.14E-01	1.28E+00	1.92E-04 +/- 1.01E-05
45	756.61	5.34E-01 +/- 1.50E-01	1.27E+00	1.88E-04 +/- 9.54E-06
46	769.75	1.18E+00 +/- 1.64E-01	1.27E+00	1.85E-04 +/- 9.20E-06
47	2225.21	1.24E-01 +/- 4.50E-02	1.16E+00	4.39E-05 +/- 2.41E-05
48	2236.00	1.00E+02 +/- 1.71E+00	1.16E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 95.35 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.326 +/- 0.0181
SE-75	279.53	0.000 +/- 0.0000	0.353 +/- 0.0368
SE-75	400.65	0.000 +/- 0.0000	0.465 +/- 0.0660

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.06	8.79E+00 +/- 6.28E-01	4.10E+00	4.98E-09 +/- 2.85E-08
	2	50.33	1.30E+01 +/- 1.95E+00	4.10E+00	3.05E-06 +/- 7.09E-06
	3	60.16	6.71E+02 +/- 9.01E+00	4.10E+00	1.60E-05 +/- 2.39E-05
	4	99.36	2.09E+02 +/- 4.28E+00	4.10E+00	2.43E-04 +/- 5.52E-05
	5	111.69	4.37E+01 +/- 2.35E+00	4.10E+00	3.35E-04 +/- 3.49E-05
	6	116.28	2.44E+01 +/- 3.14E+00	4.10E+00	3.66E-04 +/- 2.82E-05
M	7	125.94	2.85E+01 +/- 9.53E-01	4.10E+00	4.24E-04 +/- 2.46E-05
m	8	129.96	1.95E+02 +/- 3.42E+00	4.10E+00	4.45E-04 +/- 2.77E-05
	9	144.74	2.94E+00 +/- 1.38E+00	3.04E+00	5.04E-04 +/- 4.47E-05
	10	148.57	2.25E+01 +/- 1.37E+00	2.84E+00	5.16E-04 +/- 4.85E-05
	11	172.07	1.01E+01 +/- 1.60E+00	2.22E+00	5.55E-04 +/- 6.09E-05
	12	179.79	3.47E+00 +/- 1.20E+00	2.11E+00	5.58E-04 +/- 6.12E-05
	13	189.90	4.72E+00 +/- 1.03E+00	1.98E+00	5.58E-04 +/- 5.97E-05
	14	196.20	7.50E+00 +/- 1.19E+00	1.92E+00	5.56E-04 +/- 5.80E-05
	15	208.65	1.18E+02 +/- 2.45E+00	1.81E+00	5.47E-04 +/- 5.32E-05
M	16	222.31	2.12E+00 +/- 5.95E-01	1.71E+00	5.33E-04 +/- 4.70E-05

m	17	225.57	2.69E+00	+/-	6.49E-01	1.69E+00	5.30E-04	+/-	4.54E-05
	18	244.70	2.16E+00	+/-	1.04E+00	1.58E+00	5.05E-04	+/-	3.65E-05
	19	256.02	6.92E+00	+/-	8.72E-01	1.52E+00	4.90E-04	+/-	3.18E-05
M	20	264.77	2.12E+00	+/-	3.72E-01	1.49E+00	4.78E-04	+/-	2.86E-05
m	21	268.17	6.60E+00	+/-	6.78E-01	1.48E+00	4.74E-04	+/-	2.74E-05
	22	298.13	4.54E+00	+/-	9.06E-01	1.42E+00	4.34E-04	+/-	2.02E-05
	23	311.90	5.36E+00	+/-	7.39E-01	1.41E+00	4.17E-04	+/-	1.86E-05
M	24	321.59	5.63E+00	+/-	6.04E-01	1.40E+00	4.05E-04	+/-	1.79E-05
m	25	324.05	6.44E+00	+/-	6.18E-01	1.39E+00	4.02E-04	+/-	1.78E-05
M	26	333.33	5.08E+01	+/-	1.30E+00	1.38E+00	3.92E-04	+/-	1.76E-05
m	27	336.29	2.00E+01	+/-	6.75E-01	1.38E+00	3.88E-04	+/-	1.76E-05
M	28	342.06	1.88E+00	+/-	1.88E-01	1.37E+00	3.82E-04	+/-	1.76E-05
m	29	345.64	4.20E+01	+/-	7.20E-01	1.37E+00	3.78E-04	+/-	1.76E-05
	30	375.63	7.90E+01	+/-	1.88E+00	1.34E+00	3.49E-04	+/-	1.82E-05
M	31	380.77	1.96E+01	+/-	7.32E-01	1.34E+00	3.44E-04	+/-	1.83E-05
m	32	383.41	1.89E+01	+/-	6.87E-01	1.33E+00	3.42E-04	+/-	1.84E-05
	33	393.49	4.21E+01	+/-	9.90E-01	1.33E+00	3.33E-04	+/-	1.86E-05
	34	413.70	1.08E+02	+/-	1.78E+00	1.31E+00	3.17E-04	+/-	1.88E-05
	35	423.16	7.08E+00	+/-	4.71E-01	1.31E+00	3.10E-04	+/-	1.88E-05
	36	452.04	1.31E+01	+/-	4.83E-01	1.30E+00	2.90E-04	+/-	1.86E-05
	37	598.56	2.43E-01	+/-	9.27E-02	1.26E+00	2.22E-04	+/-	1.40E-05
	38	619.44	8.31E-01	+/-	1.55E-01	1.25E+00	2.15E-04	+/-	1.32E-05
	39	646.46	4.77E-01	+/-	1.31E-01	1.25E+00	2.08E-04	+/-	1.23E-05
M	40	659.33	3.06E-01	+/-	8.09E-02	1.25E+00	2.04E-04	+/-	1.18E-05
m	41	662.93	5.24E+00	+/-	3.79E-01	1.24E+00	2.03E-04	+/-	1.17E-05
	42	688.83	5.39E-01	+/-	1.18E-01	1.24E+00	1.96E-04	+/-	1.09E-05

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	722.01	2.73E+00 +/- 2.03E-01	1.23E+00	1.89E-04 +/- 9.99E-06
44	737.70	1.41E-01 +/- 5.47E-02	1.23E+00	1.85E-04 +/- 9.60E-06
45	756.72	1.92E-01 +/- 6.90E-02	1.23E+00	1.82E-04 +/- 9.17E-06
46	769.89	6.91E-01 +/- 1.27E-01	1.22E+00	1.79E-04 +/- 8.90E-06
47	825.09	5.25E-02 +/- 3.47E-02	1.21E+00	1.69E-04 +/- 7.97E-06
48	1810.21	1.02E-01 +/- 3.71E-02	1.14E+00	7.58E-05 +/- 1.79E-05
49	2236.00	1.00E+02 +/- 1.62E+00	1.13E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 107.93 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.341 +/- 0.0207
SE-75	264.65	0.000 +/- 0.0000	0.591 +/- 0.0193
SE-75	279.53	0.000 +/- 0.0000	0.548 +/- 0.0280
SE-75	400.65	0.000 +/- 0.0000	0.586 +/- 0.0458

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.30	7.65E+00 +/- 5.28E-01	1.99E+00	7.99E-06 +/- 7.69E-06
	2	60.18	2.03E+02 +/- 3.02E+00	1.61E+00	1.10E-04 +/- 3.84E-05
	3	99.41	6.00E+01 +/- 2.01E+00	1.50E+00	3.25E-04 +/- 3.31E-05
	4	111.71	1.53E+01 +/- 1.33E+00	1.49E+00	3.75E-04 +/- 2.72E-05
	5	116.23	7.26E+00 +/- 1.65E+00	1.48E+00	3.91E-04 +/- 2.55E-05
M	6	125.91	9.53E+00 +/- 5.22E-01	1.47E+00	4.19E-04 +/- 2.31E-05
m	7	130.00	5.81E+01 +/- 1.46E+00	1.47E+00	4.29E-04 +/- 2.26E-05
	8	148.57	7.40E+00 +/- 9.36E-01	1.43E+00	4.62E-04 +/- 2.28E-05
	9	171.94	1.89E+00 +/- 8.48E-01	1.37E+00	4.80E-04 +/- 2.51E-05
	10	179.68	1.00E+00 +/- 6.01E-01	1.35E+00	4.81E-04 +/- 2.56E-05
	11	189.83	1.90E+00 +/- 8.42E-01	1.33E+00	4.81E-04 +/- 2.61E-05
	12	196.48	2.91E+00 +/- 7.70E-01	1.32E+00	4.79E-04 +/- 2.62E-05
	13	208.67	3.06E+01 +/- 1.13E+00	1.30E+00	4.74E-04 +/- 2.60E-05
	14	255.87	1.64E+00 +/- 5.40E-01	1.23E+00	4.39E-04 +/- 2.29E-05
	15	268.27	1.59E+00 +/- 5.87E-01	1.22E+00	4.28E-04 +/- 2.17E-05
	16	298.06	9.34E-01 +/- 5.17E-01	1.24E+00	4.01E-04 +/- 1.90E-05
	17	311.90	8.79E-01 +/- 4.51E-01	1.24E+00	3.88E-04 +/- 1.78E-05
	18	324.25	3.42E+00 +/- 5.83E-01	1.23E+00	3.77E-04 +/- 1.69E-05

M 19	333.34	1.31E+01	+/-	6.16E-01	1.23E+00	3.69E-04	+/-	1.62E-05
m 20	336.36	4.84E+00	+/-	3.27E-01	1.23E+00	3.67E-04	+/-	1.60E-05
21	345.66	1.08E+01	+/-	7.86E-01	1.23E+00	3.59E-04	+/-	1.54E-05
22	368.82	4.24E+00	+/-	5.00E-01	1.22E+00	3.40E-04	+/-	1.42E-05
23	375.66	2.18E+01	+/-	8.61E-01	1.22E+00	3.34E-04	+/-	1.38E-05
M 24	380.83	5.14E+00	+/-	3.59E-01	1.22E+00	3.30E-04	+/-	1.36E-05
m 25	383.37	5.49E+00	+/-	3.60E-01	1.22E+00	3.28E-04	+/-	1.35E-05
26	393.50	1.13E+01	+/-	4.51E-01	1.22E+00	3.21E-04	+/-	1.31E-05
27	413.70	2.98E+01	+/-	6.76E-01	1.21E+00	3.06E-04	+/-	1.25E-05
M 28	423.22	2.25E+00	+/-	2.56E-01	1.21E+00	3.00E-04	+/-	1.22E-05
m 29	426.96	4.26E-01	+/-	9.19E-02	1.21E+00	2.97E-04	+/-	1.21E-05
30	452.05	3.59E+00	+/-	2.22E-01	1.20E+00	2.82E-04	+/-	1.16E-05
31	619.52	3.35E-01	+/-	9.92E-02	1.17E+00	2.06E-04	+/-	9.86E-06
32	646.42	1.96E-01	+/-	9.50E-02	1.17E+00	1.98E-04	+/-	9.58E-06
33	662.42	1.34E+00	+/-	1.37E-01	1.17E+00	1.93E-04	+/-	9.41E-06
34	689.59	1.52E-01	+/-	5.19E-02	1.16E+00	1.86E-04	+/-	9.10E-06
35	722.01	7.56E-01	+/-	1.09E-01	1.16E+00	1.78E-04	+/-	8.71E-06
36	770.08	3.19E-01	+/-	5.48E-02	1.15E+00	1.68E-04	+/-	8.12E-06
37	778.90	2.64E-02	+/-	2.25E-02	1.15E+00	1.66E-04	+/-	8.00E-06
38	2236.00	1.00E+02	+/-	1.54E+00	1.09E+00	1.19E-04	+/-	2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 112.64 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.338 +/- 0.0177
SE-75	264.65	0.000 +/- 0.0000	0.602 +/- 0.0173
SE-75	279.53	0.000 +/- 0.0000	0.595 +/- 0.0244
SE-75	400.65	0.000 +/- 0.0000	0.587 +/- 0.0371

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
1	31.99	2.49E+00	+/-	2.93E-01	2.02E+00	6.04E-09	+/-	3.64E-08
2	60.16	2.92E+01	+/-	8.78E-01	1.61E+00	1.65E-05	+/-	2.58E-05
3	67.73	1.04E+00	+/-	4.44E-01	1.58E+00	3.88E-05	+/-	4.34E-05
4	95.26	2.57E+00	+/-	9.24E-01	1.52E+00	2.06E-04	+/-	6.13E-05
5	99.42	4.26E+00	+/-	8.06E-01	1.51E+00	2.36E-04	+/-	5.57E-05
6	111.65	1.75E+00	+/-	7.64E-01	1.49E+00	3.22E-04	+/-	3.47E-05
7	129.29	1.75E+00	+/-	5.40E-01	1.48E+00	4.21E-04	+/-	2.66E-05
8	208.78	8.73E-01	+/-	3.81E-01	1.29E+00	5.10E-04	+/-	5.15E-05
9	375.69	6.88E-01	+/-	1.72E-01	1.21E+00	3.18E-04	+/-	1.78E-05
10	393.64	2.29E-01	+/-	1.64E-01	1.22E+00	3.03E-04	+/-	1.81E-05

11	413.70	4.84E-01	+/-	1.00E-01	1.21E+00	2.88E-04	+/- 1.83E-05
12	511.64	1.36E-01	+/-	8.60E-02	1.19E+00	2.33E-04	+/- 1.66E-05
13	1408.01	3.51E-02	+/-	1.76E-02	1.11E+00	1.05E-04	+/- 6.90E-06
14	2236.00	1.00E+02	+/-	1.51E+00	1.09E+00	6.12E-05	+/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 113.28 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.311 +/- 0.0151
SE-75	264.65	0.000 +/- 0.0000	0.555 +/- 0.0160
SE-75	279.53	0.000 +/- 0.0000	0.552 +/- 0.0226
SE-75	400.65	0.000 +/- 0.0000	0.603 +/- 0.0342

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.94	1.04E+00 +/- 2.32E-01	2.11E+00	1.64E-05 +/- 1.64E-05
2	60.12	1.27E+01 +/- 6.14E-01	1.67E+00	1.37E-04 +/- 4.88E-05
3	67.77	1.35E+00 +/- 4.42E-01	1.63E+00	1.79E-04 +/- 4.97E-05
4	99.25	1.42E+00 +/- 6.60E-01	1.55E+00	3.29E-04 +/- 3.41E-05
5	778.90	3.96E-02 +/- 2.59E-02	1.14E+00	1.76E-04 +/- 8.75E-06
6	867.39	3.30E-02 +/- 2.61E-02	1.13E+00	1.60E-04 +/- 7.45E-06
7	1085.91	8.80E-03 +/- 8.80E-03	1.12E+00	1.31E-04 +/- 4.92E-06
8	1174.02	7.14E-02 +/- 3.88E-02	1.11E+00	1.23E-04 +/- 4.69E-06
9	1333.65	1.06E-01 +/- 3.05E-02	1.11E+00	1.12E-04 +/- 5.84E-06
10	2236.00	1.00E+02 +/- 1.51E+00	1.08E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 113.52 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.274 +/- 0.0135
SE-75	264.65	0.000 +/- 0.0000	0.392 +/- 0.0130
SE-75	279.53	0.000 +/- 0.0000	0.365 +/- 0.0191
SE-75	400.65	0.000 +/- 0.0000	0.481 +/- 0.0297

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.92	6.31E-01 +/- 1.48E-01	2.26E+00	1.34E-03 +/- 8.74E-03
2	48.63	1.63E+00 +/- 4.19E-01	1.85E+00	6.21E-04 +/- 1.76E-03
3	60.09	5.50E+00 +/- 4.69E-01	1.75E+00	5.04E-04 +/- 8.50E-04
4	67.86	6.50E-01 +/- 4.04E-01	1.71E+00	4.65E-04 +/- 5.55E-04
5	778.90	1.41E-02 +/- 1.62E-02	1.21E+00	1.83E-04 +/- 9.12E-06
6	1408.01	7.83E-02 +/- 2.61E-02	1.15E+00	9.35E-05 +/- 6.52E-06
7	2236.00	1.00E+02 +/- 1.50E+00	1.12E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.78 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.087 +/- 0.0116
SE-75	264.65	0.000 +/- 0.0000	0.153 +/- 0.0076
SE-75	279.53	0.000 +/- 0.0000	0.161 +/- 0.0139
SE-75	400.65	0.000 +/- 0.0000	0.203 +/- 0.0197

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.00	3.57E-01 +/- 1.31E-01	3.73E+00	2.32E-09 +/- 1.43E-08
M	2	57.62	1.47E+00 +/- 2.31E-01	2.64E+00	8.83E-06 +/- 1.58E-05
m	3	59.93	1.97E+00 +/- 2.69E-01	2.60E+00	1.26E-05 +/- 2.03E-05
	4	67.63	6.44E-01 +/- 2.64E-01	2.51E+00	3.26E-05 +/- 3.74E-05
	5	311.90	3.00E-01 +/- 1.95E-01	1.81E+00	3.88E-04 +/- 1.81E-05

6	867.39	3.95E-02	+/-	2.58E-02	1.46E+00	1.48E-04	+/- 7.05E-06
7	1085.91	2.63E-02	+/-	1.52E-02	1.40E+00	1.28E-04	+/- 5.60E-06
8	2236.00	1.00E+02	+/-	1.50E+00	1.28E+00	6.48E-05	+/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.99 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.344 +/- 0.0128
SE-75	264.65	0.000 +/- 0.0000	0.460 +/- 0.0137
SE-75	279.53	0.000 +/- 0.0000	0.452 +/- 0.0199
SE-75	400.65	0.000 +/- 0.0000	0.479 +/- 0.0291

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	50.00	2.12E+00 +/- 3.18E-01	1.67E+00	4.96E-06 +/- 1.33E-05
2	60.28	3.76E-01 +/- 2.31E-01	1.60E+00	2.32E-05 +/- 3.91E-05
3	300.10	2.58E-01 +/- 1.52E-01	1.33E+00	3.86E-04 +/- 1.92E-05
4	311.90	4.07E-01 +/- 1.46E-01	1.32E+00	3.74E-04 +/- 1.79E-05
5	413.70	6.37E-02 +/- 4.05E-02	1.30E+00	2.89E-04 +/- 1.94E-05
6	778.90	5.76E-02 +/- 2.76E-02	1.21E+00	1.70E-04 +/- 8.63E-06
7	1085.91	2.33E-02 +/- 2.15E-02	1.18E+00	1.32E-04 +/- 5.78E-06
8	1112.12	4.30E-02 +/- 2.96E-02	1.17E+00	1.30E-04 +/- 5.64E-06
9	2236.00	1.00E+02 +/- 1.50E+00	1.12E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 114.14 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.863 +/- 0.0247
SE-75	264.65	0.000 +/- 0.0000	0.975 +/- 0.0229
SE-75	279.53	0.000 +/- 0.0000	0.982 +/- 0.0301
SE-75	400.65	0.000 +/- 0.0000	0.938 +/- 0.0422

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.08	5.49E-01 +/- 2.21E-01	1.07E+00	9.54E-05 +/- 1.50E-04
2	129.29	7.37E-01 +/- 3.35E-01	1.06E+00	4.20E-04 +/- 2.62E-05
3	867.39	3.52E-02 +/- 2.82E-02	1.02E+00	1.55E-04 +/- 7.11E-06
4	2236.00	1.00E+02 +/- 1.50E+00	1.01E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.20 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.925 +/- 0.0254
SE-75	264.65	0.000 +/- 0.0000	0.945 +/- 0.0226
SE-75	279.53	0.000 +/- 0.0000	0.983 +/- 0.0300
SE-75	400.65	0.000 +/- 0.0000	0.978 +/- 0.0432

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.86	4.60E-01 +/- 1.06E-01	1.06E+00	1.04E-09 +/- 6.67E-09
2	49.65	1.74E+00 +/- 2.58E-01	1.04E+00	1.63E-06 +/- 4.31E-06
3	60.30	3.54E-01 +/- 1.62E-01	1.04E+00	1.25E-05 +/- 2.05E-05
4	300.10	2.05E-01 +/- 1.06E-01	1.01E+00	3.60E-04 +/- 1.79E-05
5	311.90	1.56E-01 +/- 6.33E-02	1.01E+00	3.47E-04 +/- 1.64E-05
6	443.98	5.11E-02 +/- 3.84E-02	1.01E+00	2.45E-04 +/- 1.65E-05
7	1001.03	3.72E-02 +/- 2.96E-02	1.01E+00	1.29E-04 +/- 5.86E-06
8	1085.91	1.72E-02 +/- 1.22E-02	1.01E+00	1.21E-04 +/- 5.37E-06

9	1112.12	2.58E-02	+/-	1.49E-02	1.00E+00	1.18E-04	+/- 5.22E-06
10	1333.72	1.12E-01	+/-	3.11E-02	1.00E+00	9.74E-05	+/- 5.41E-06
11	2236.00	1.00E+02	+/-	1.49E+00	1.00E+00	3.18E-05	+/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.21 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.816 +/- 0.0231
SE-75	264.65	0.000 +/- 0.0000	0.938 +/- 0.0223
SE-75	279.53	0.000 +/- 0.0000	0.932 +/- 0.0286
SE-75	400.65	0.000 +/- 0.0000	0.901 +/- 0.0416

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)		Correction Factor	Original Efficiency		
	1	31.83	5.36E-01	+/- 1.15E-01	1.16E+00	3.89E-06	+/-	4.70E-06
M	2	60.17	2.61E-01	+/- 1.03E-01	1.10E+00	5.62E-05	+/-	2.41E-05
m	3	62.61	1.85E-01	+/- 8.48E-02	1.10E+00	6.32E-05	+/-	2.50E-05
	4	136.00	4.83E-01	+/- 2.40E-01	1.03E+00	2.35E-04	+/-	1.45E-05
	5	311.90	1.22E-01	+/- 8.11E-02	1.03E+00	2.22E-04	+/-	1.24E-05
	6	1333.81	8.19E-02	+/- 3.16E-02	1.02E+00	6.64E-05	+/-	4.06E-06
	7	2236.00	1.00E+02	+/- 1.50E+00	1.02E+00	6.28E-05	+/-	1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: S100-2371
Peak Locate Performed on: 8-20-07 12:04:33 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.78	0.1082	32.06	38.39
2	100.95	0.1602	50.14	13.27
3	120.99	0.0324	60.16	414.55
4	151.74	0.2934	75.54	5.69
5	199.38	0.0423	99.35	223.67
6	224.02	0.0616	111.68	112.68
7	233.19	0.0697	116.26	45.27
8	260.56	0.0425	129.95	222.06
9	299.16	0.0868	149.25	61.45
10	344.70	0.1564	172.02	18.20
11	360.18	0.1758	179.75	14.70
12	380.50	0.1527	189.92	17.29
13	393.12	0.1288	196.23	27.40
14	417.96	0.0438	208.64	217.84
15	444.96	0.2453	222.15	7.49
16	477.24	0.2562	238.29	6.54
17	488.55	0.2193	243.94	7.55
18	512.68	0.1210	256.00	27.45
19	529.91	0.2144	264.64	9.77
20	537.00	0.1271	268.16	27.24
21	596.68	0.1482	298.01	18.70
22	625.54	0.1097	312.43	30.74
23	643.47	0.1913	321.68	11.63
24	648.98	0.1628	324.03	15.58
25	667.15	0.0609	333.31	110.46
26	673.73	0.0989	336.29	47.36
27	684.35	0.1413	342.06	22.56
28	691.88	0.0598	345.61	111.72
29	738.33	0.0921	368.83	36.47
30	751.91	0.0455	375.62	189.88
31	761.93	0.0828	380.78	65.74
32	767.74	0.0909	383.36	55.25
33	787.61	0.0599	393.47	97.82
34	829.24	0.0452	414.29	180.87
35	846.99	0.0897	423.16	50.18
36	893.44	0.2006	446.39	9.09

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	904.69	0.0768	452.01	60.87
38	964.80	0.2327	482.07	7.46
39	1197.30	0.2559	598.32	5.35
40	1239.47	0.1497	619.40	14.69
41	1267.78	0.2778	633.55	5.07
42	1293.56	0.1666	646.45	12.24
43	1306.88	0.1747	653.11	10.95
44	1318.59	0.2838	659.35	7.32
45	1326.53	0.0937	662.95	37.67
46	1379.26	0.1905	689.29	10.01
47	1445.65	0.1131	722.49	26.63
48	1475.90	0.2735	737.61	5.12
49	1514.11	0.2155	756.72	7.75
50	1540.36	0.1897	769.85	9.75
51	2348.75	0.2180	1174.04	6.92
52	2667.43	0.2097	1333.38	6.91
53	2923.76	0.2367	1461.55	5.39
54	4471.84	0.0269	2235.58	397.02

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: S100-2371
Peak Analysis Performed on: 8-20-07 12:04:34 PM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	60-	69	64.78	32.06	7.77E+03	184.13	1.04E+04
2	94-	104	100.95	50.14	5.98E+03	365.82	5.20E+04
3	114-	127	120.99	60.16	3.21E+05	713.89	6.86E+04
4	145-	158	151.74	75.54	2.71E+03	420.54	6.23E+04
5	194-	203	199.38	99.35	1.09E+05	776.99	2.20E+05
6	217-	227	224.02	111.68	2.19E+04	545.33	1.13E+05
7	227-	240	233.19	116.26	1.16E+04	727.37	1.76E+05
8	256-	267	260.56	129.95	8.32E+04	503.54	6.63E+04
9	297-	306	299.16	149.25	8.71E+03	326.53	4.24E+04
10	338-	351	344.70	172.02	4.93E+03	375.93	4.94E+04
11	356-	363	360.18	179.75	1.96E+03	236.80	2.69E+04
12	377-	387	380.50	189.92	3.13E+03	292.96	3.46E+04
13	390-	400	393.12	196.23	4.35E+03	287.43	3.27E+04
14	413-	425	417.96	208.64	6.14E+04	453.52	5.27E+04
15	442-	448	444.96	222.15	3.66E+02	164.76	1.41E+04
16	474-	482	477.24	238.29	4.87E+02	184.20	1.56E+04
17	482-	495	488.55	243.94	1.18E+03	256.88	2.35E+04
18	507-	520	512.68	256.00	3.88E+03	245.02	2.03E+04
M 19	527-	544	529.96	264.64	1.11E+03	95.84	9.41E+03
m 20	527-	544	536.98	268.16	3.15E+03	160.76	1.17E+04
21	593-	604	596.68	298.01	2.18E+03	189.05	1.33E+04
22	620-	631	625.54	312.43	3.14E+03	187.87	1.28E+04
M 23	638-	656	644.02	321.68	2.76E+03	140.94	1.20E+04
m 24	638-	656	648.72	324.03	3.43E+03	149.84	1.34E+04
M 25	659-	679	667.30	333.31	2.70E+04	261.48	8.81E+03
m 26	659-	679	673.24	336.29	1.05E+04	142.91	8.79E+03
M 27	679-	699	684.79	342.06	1.20E+03	67.09	1.05E+04
m 28	679-	699	691.89	345.61	2.23E+04	184.97	8.20E+03
29	731-	745	738.33	368.83	8.34E+03	198.35	1.07E+04
30	745-	759	751.91	375.62	4.16E+04	370.49	3.09E+04
M 31	759-	775	762.22	380.78	1.03E+04	156.22	5.34E+03
m 32	759-	775	767.39	383.36	1.01E+04	148.92	4.46E+03
33	779-	795	787.61	393.47	2.19E+04	194.75	5.12E+03
34	821-	836	829.24	414.29	5.74E+04	260.96	3.55E+03
35	839-	852	846.99	423.16	3.15E+03	117.19	3.79E+03
36	889-	897	893.44	446.39	2.85E+02	47.67	9.31E+02
37	897-	912	904.69	452.01	6.49E+03	111.73	2.00E+03

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	38	959-	972	964.80	482.07	1.27E+02	52.80	9.59E+02
	39	1193-	1201	1197.30	598.32	1.04E+02	25.10	2.45E+02
	40	1231-	1247	1239.47	619.40	6.23E+02	43.56	4.08E+02
	41	1262-	1273	1267.78	633.55	4.37E+01	28.93	3.08E+02
	42	1290-	1301	1293.56	646.45	9.30E+01	39.21	5.43E+02
	43	1301-	1315	1306.88	653.11	2.53E+02	46.44	6.10E+02
M	44	1315-	1334	1319.38	659.35	1.90E+02	19.73	2.88E+02
m	45	1315-	1334	1326.58	662.95	2.87E+03	83.22	2.74E+02
	46	1370-	1385	1379.26	689.29	2.96E+02	30.95	2.19E+02
	47	1441-	1454	1445.65	722.49	1.39E+03	45.05	2.36E+02
	48	1467-	1484	1475.90	737.61	7.08E+01	24.75	1.66E+02
	49	1507-	1522	1514.11	756.72	1.68E+02	23.54	1.28E+02
	50	1531-	1548	1540.36	769.85	3.56E+02	30.69	1.80E+02
	51	2339-	2357	2348.75	1174.04	1.14E+02	18.71	6.91E+01
	52	2662-	2676	2667.43	1333.38	1.43E+02	16.59	4.50E+01
	53	2914-	2933	2923.76	1461.55	7.58E+01	13.53	3.02E+01
	54	4466-	4482	4471.84	2235.58	1.73E+05	417.08	3.03E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: S100-2371
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.988	2236.00*	100.00	7.329E+02	1.999E+02
Np-237	0.746	300.10	6.63		
		311.90*	38.60	7.377E+00	4.477E-01
Pu-239	0.976	413.70*	0.00	4.326E+06	8.589E+04
Pu-239A	0.970	129.29*	0.01	1.218E+06	3.431E+04
Am-241	0.980	662.42*	0.00	1.192E+06	3.700E+04
Am-241D	0.984	722.01*	0.00	1.266E+06	4.338E+04
Pu-241	0.968	148.57*	0.00	3.840E+06	1.700E+05

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-20-07 12:04:33 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	32.06	7.2236E+01	2.38
2	50.14	5.5599E+01	6.12
3	60.16	2.9860E+03	0.34
4	75.54	2.5191E+01	15.51
5	99.35	1.0141E+03	0.76
6	111.68	2.0361E+02	2.50
7	116.26	1.0809E+02	6.26
10	172.02	4.5778E+01	7.64
11	179.75	1.8195E+01	12.10
12	189.92	2.9072E+01	9.37
13	196.23	4.0464E+01	6.61
14	208.64	5.7089E+02	0.78
15	222.15	3.3992E+00	45.04
16	238.29	4.5248E+00	37.83
17	243.94	1.0971E+01	21.76
18	256.00	3.6069E+01	6.32
M 19	264.64	1.0288E+01	8.66
m 20	268.16	2.9287E+01	5.11
21	298.01	2.0226E+01	8.69
M 23	321.68	2.5613E+01	5.12
m 24	324.03	3.1837E+01	4.38
M 25	333.31	2.5057E+02	1.00
m 26	336.29	9.7176E+01	1.39
M 27	342.06	1.1115E+01	5.61
m 28	345.61	2.0733E+02	0.87
29	368.83	7.7468E+01	2.39
30	375.62	3.8628E+02	0.93
M 31	380.78	9.5477E+01	1.54
m 32	383.36	9.3763E+01	1.50
33	393.47	2.0377E+02	0.93
35	423.16	2.9250E+01	3.73
36	446.39	2.6518E+00	16.71
37	452.01	6.0273E+01	1.74
38	482.07	1.1829E+00	41.48
39	598.32	9.6684E-01	24.13
40	619.40	5.7931E+00	6.99
41	633.55	4.0602E-01	66.22
42	646.45	8.6405E-01	42.17
43	653.11	2.3502E+00	18.36
M 44	659.35	1.7625E+00	10.41
46	689.29	2.7479E+00	10.47
48	737.61	6.5804E-01	34.95
49	756.72	1.5586E+00	14.04
50	769.85	3.3067E+00	8.63
51	1174.04	1.0586E+00	16.42
52	1333.38	1.3288E+00	11.61
53	1461.55	7.0419E-01	17.85

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.03E+02	+/-	1.18E+02		3.62E-02	+/-	5.33E-03
SE-75	<	5.66E-01	+/-	3.82E-02	<	2.55E-05	+/-	1.72E-06
EU-152x		8.80E-02	+/-	4.38E-02		3.96E-06	+/-	1.97E-06
U-233		2.46E+03	+/-	1.23E+03		1.11E-01	+/-	5.55E-02
U-235	<	7.15E-01	+/-	9.04E-02	<	3.22E-05	+/-	4.07E-06
Np-237		9.44E+00	+/-	5.48E-01		4.25E-04	+/-	2.47E-05
Pu-238	<	5.22E+04	+/-	5.95E+03	<	2.35E+00	+/-	2.68E-01
U-238		4.24E+00	+/-	1.71E+00		1.91E-04	+/-	7.70E-05
Pu-239		5.30E+06	+/-	1.83E+05		2.39E+02	+/-	8.22E+00
Pu-239A		3.92E+06	+/-	1.46E+05		1.77E+02	+/-	6.59E+00
Am-241		1.38E+06	+/-	5.76E+04		6.21E+01	+/-	2.60E+00
Am-241D		1.43E+06	+/-	6.11E+04		6.43E+01	+/-	2.75E+00
Pu-241		1.13E+07	+/-	7.09E+05		5.08E+02	+/-	3.19E+01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-233	2.56E-01	+/-	1.28E-01
Np-237	1.34E-02	+/-	7.77E-04
U-238	1.26E+01	+/-	5.09E+00
Pu-239	8.54E+01	+/-	2.94E+00
Pu-239A	6.32E+01	+/-	2.36E+00
Am-241	4.02E-01	+/-	1.68E-02
Pu-241	1.09E-01	+/-	6.86E-03

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.33E+02	+/-	2.00E+02		3.30E-02	+/-	9.00E-03
SE-75	<	1.21E+00	+/-	1.35E-02	<	5.46E-05	+/-	6.08E-07
EU-152x	<	6.85E-01	+/-	1.43E-02	<	3.08E-05	+/-	6.46E-07
U-233	<	7.00E+04	+/-	1.77E+03	<	3.15E+00	+/-	7.96E-02
U-235	<	1.66E+00	+/-	4.31E-02	<	7.48E-05	+/-	1.94E-06
Np-237		7.38E+00	+/-	4.48E-01		3.32E-04	+/-	2.02E-05
Pu-238	<	1.23E+05	+/-	2.88E+03	<	5.53E+00	+/-	1.30E-01
U-238	<	1.58E+01	+/-	2.60E-01	<	7.12E-04	+/-	1.17E-05
Pu-239		4.33E+06	+/-	8.59E+04		1.95E+02	+/-	3.87E+00
Pu-239A		1.22E+06	+/-	3.43E+04		5.49E+01	+/-	1.55E+00
Am-241		1.19E+06	+/-	3.70E+04		5.37E+01	+/-	1.67E+00
Am-241D		1.27E+06	+/-	4.34E+04		5.70E+01	+/-	1.95E+00
Pu-241		3.84E+06	+/-	1.70E+05		1.73E+02	+/-	7.66E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	1.05E-02	+/-	6.36E-04
Pu-239	6.97E+01	+/-	1.38E+00
Pu-239A	1.96E+01	+/-	5.52E-01
Am-241	3.48E-01	+/-	1.08E-02
Pu-241	3.71E-02	+/-	1.64E-03

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.920	+/-	7.6682
Matrix Longitudinal Ratio:	0.993	+/-	42.3656
Source Vertical Ratio:	0.897	+/-	0.4497
Matrix Vertical Ratio:	0.862	+/-	0.3325

NUDS could not find the transmission peak in one radial segment.
NUDS could not find the source peak in one radial segment.

Radioassay Data Sheet — Tue Aug 28 05:57:26 2007

Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: LL85801034	Gross Weight (kg)	: 69.2
Sequence Number	: 2373	Fill Height (%)	: 100.0
Assay Date	: 08/20/07 16:09:13	Density (g/cc)	: 0.18
		Net Weight (kg)	: 37.40
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	5.59e-06	+/-	6.15e-07 Ci/g
Total Pu-239 Equiv Activity:	2.12e-01	+/-	2.29e-02 Ci
Total Pu-239 Fissile Gram Equiv:	2.02e+00	+/-	3.13e-01 g
Decay Heat:	6.77e-03	+/-	7.38e-04 W
Total Pu Mass:	1.77e+00	+/-	3.03e-01 g
TMU:	18.60%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	1.10e-01	2.63e+00
Pu-239	9.19e+01	2.04e-01
Pu-240	7.79e+00	2.39e+00
Pu-241	1.67e-01	2.48e+00
Pu-242	4.60e-02	1.00e+01
Am-241	7.36e-01	1.46e+00
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	2.00e+01	5.34e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	1.94e-03	3.64e-04	3.32e-02	6.24e-03	3.85e-04
Pu-239	1.62e+00	3.02e-01	1.01e-01	1.87e-02	3.92e-02
Pu-240	1.38e-01	2.58e-02	3.12e-02	5.86e-03	0.00e+00
Pu-241	2.95e-03	5.53e-04	3.05e-01	5.72e-02	3.73e-04
Pu-242	8.14e-04	1.72e-04	3.20e-06	6.75e-07	0.00e+00
Am-241	1.29e-02	2.97e-03	4.40e-02	1.02e-02	2.83e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	6.81e-04	1.61e-04	4.80e-07	1.13e-07	1.46e-04
U-235	3.88e-01	8.24e-02	8.39e-07	1.78e-07	5.43e-02
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.98e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	4.09e-01
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Robert J Hartlett — 8-28-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85801034
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2373
Assayed on: 08/20/07 16:09:13
Report Generated: 08/28/07 17:57:11
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

OK

REVIEW Pu-240 Wt Pct -2 Sigma error <7.41> greater than <5.87> Review MGA R
Pu-240 Wt Pct error <2.39> is within limits
Pu-238 Wt Pct error <2.63> is within limits
QFIT <1.00> is within limits

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.180> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <9.48e-01> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.77> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <0.88> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <1.00> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <1.08> is acceptable in Segment 4
Pulser value <0.99> is within range in Segment 4
DEAD TIME percentage <1.07> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <1.21> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <1.38> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <1.33> is acceptable in Segment 8
Pulser value <0.99> is within range in Segment 8
DEAD TIME percentage <1.27> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <1.02> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <0.73> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <0.63> is acceptable in Segment 12
Pulser value <0.98> is within range in Segment 12
DEAD TIME percentage <0.57> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.56> is acceptable in Segment 14
Pulser value <0.98> is within range in Segment 14
DEAD TIME percentage <0.57> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15
DEAD TIME percentage <0.54> is acceptable in Segment 16
Pulser value <0.98> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
Transmission results are acceptable in Segment 5
Transmission results are acceptable in Segment 6
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

All energy peaks within <3.00e+00> RCHISQ limit

Section 7 - FGE MASS REVIEW

FGE Mass <2.34> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

REVIEW Am-241 ratio <126.43> is below lower limit <200.00> OK
Np-237 ratio <2384.93> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <1.62> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Cs-137 Z Value <1.62> is less than limit <1.96> OK. Checked.

Independent Reviewer: Robert J Haslett Date: 8-28-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85801034
Item Description Code:
Sequence Number: 2373
Assayed on: 08/20/07 16:09:13
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA	
Pu-240 Wt Pct -2 Sigma error is greater than upper limit.	OK
SECTION 9 - IDC COUNT TYPE	
IDC is not available.	N/A
SECTION 10 - AM-241 & NP-237 INTERFERENCE TEST	
Possible Am-241 interference with 129 KeV peak.	OK. Checked.

Technical Reviewer: Robert J Haskett Jr Date: 8-28-07

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*********************************************************************
*****                    M G A   R E P O R T                    *****
*********************************************************************
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Report generated on: 8-28-07 5:46:28 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202373.CNF Sens : 30.0% LT: 55.6 Mins DT: 0.51
Measurement date: 8-20-07 Declared date: 8-20-07

Sample ID: LL85801034 Detector: Total counts: 5.650E+05

Pu g/cm2 = 0.0500 Cd g/cm2 = 1.6000 FWHM at 122 keV = 630 eV
QFIT = 1.00 FWHM at 208 keV = 805 eV
NQFIT = 1.00

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.001194	2.7	2.4	0.6579	3.0	0.10969	2.63	0.10969	2.63
Pu-239	1.000000	0.0	1.3	551.1737	2.5	91.89199	0.20	91.89199	0.20
Pu-240	0.084725	2.6	2.2	46.6983	3.1	7.78557	2.39	7.78557	2.39
Pu-241	0.001814	2.5	2.2	1.0000	0.0	0.16672	2.48	0.16672	2.48
Pu-242	(New alg.	)		0.2761	(10)	0.04603	(10)	0.04603	(10)
Am-241	0.008010	1.5	0.9	4.4151	2.4	0.73609	1.46	0.73609	1.46
U-235	0.217931	5.2	5.4			20.02612	5.34	20.02612	5.34

Pu-240 effective (meas. date) = 8.139 +/- 2.59%
Am-241 separated about 34.966 +/- 0.378 years ago
Am/Pu-241 weight ratio = 4.41511 +/- 2.37%

Messages :

Lead x-rays detected.
Error in GFIT routine : probable weak peak in location 2.
Pu-241/Pu-239 efficiency changed in MGACAL by 2%.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102373.S11
Sample ID: LL85801034 Count Sequence Number: 2373
Assay Start: 8-20-07 4:09:15 PM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 69200.0 g Net: 37400.0 g
Density: 0.180 g /ml

Container Type: 55 Gal Galv
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 4:21:04 PM 70097

Reviewed by: Robert J Haslett Jr Date: 8-28-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.11 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.287 +/- 0.0122
SE-75	264.65	0.000 +/- 0.0000	0.405 +/- 0.0120
SE-75	279.53	0.000 +/- 0.0000	0.364 +/- 0.0161
SE-75	400.65	0.000 +/- 0.0000	0.460 +/- 0.0287

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.08	1.26E-01 +/- 9.03E-02	2.20E+00	4.79E-10 +/- 3.39E-09
	2	49.83	3.24E+00 +/- 5.20E-01	1.80E+00	8.00E-07 +/- 2.35E-06
	3	60.20	4.80E+01 +/- 9.67E-01	1.72E+00	6.37E-06 +/- 1.17E-05
	4	99.43	2.03E+00 +/- 3.02E-01	1.60E+00	1.52E-04 +/- 4.17E-05
M	5	126.10	7.18E-01 +/- 1.18E-01	1.56E+00	2.88E-04 +/- 1.89E-05
m	6	129.96	2.07E+00 +/- 2.29E-01	1.56E+00	3.03E-04 +/- 2.20E-05
	7	148.57	5.33E-01 +/- 1.93E-01	1.53E+00	3.59E-04 +/- 4.14E-05
	8	208.65	7.30E-01 +/- 1.76E-01	1.44E+00	3.80E-04 +/- 4.53E-05
	9	375.60	5.01E-01 +/- 8.32E-02	1.34E+00	2.25E-04 +/- 1.39E-05
	10	393.48	2.13E-01 +/- 6.80E-02	1.33E+00	2.14E-04 +/- 1.43E-05
	11	413.70	2.98E-01 +/- 7.44E-02	1.32E+00	2.03E-04 +/- 1.44E-05
	12	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 113.99 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.182 +/- 0.0096
SE-75	264.65	0.000 +/- 0.0000	0.303 +/- 0.0102
SE-75	279.53	0.000 +/- 0.0000	0.300 +/- 0.0153
SE-75	400.65	0.000 +/- 0.0000	0.362 +/- 0.0250

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	60.20	6.97E+01 +/- 1.25E+00	2.04E+00	1.33E-04 +/- 2.14E-04
	2	99.56	3.24E+00 +/- 3.89E-01	1.85E+00	3.10E-04 +/- 7.44E-05
	3	115.90	6.09E-01 +/- 2.78E-01	1.82E+00	3.59E-04 +/- 2.91E-05
M	4	126.07	1.12E+00 +/- 1.40E-01	1.80E+00	3.82E-04 +/- 2.26E-05
m	5	129.98	3.73E+00 +/- 3.07E-01	1.79E+00	3.89E-04 +/- 2.52E-05
	6	185.71	3.63E-01 +/- 1.47E-01	1.66E+00	4.30E-04 +/- 5.06E-05
	7	208.68	1.47E+00 +/- 1.81E-01	1.62E+00	4.25E-04 +/- 4.49E-05
	8	244.70	1.81E-01 +/- 8.65E-02	1.55E+00	4.07E-04 +/- 3.17E-05
	9	300.10	9.96E-02 +/- 7.28E-02	1.51E+00	3.67E-04 +/- 1.80E-05
	10	333.51	2.16E-01 +/- 9.12E-02	1.48E+00	3.42E-04 +/- 1.64E-05
	11	345.71	3.98E-01 +/- 9.04E-02	1.47E+00	3.34E-04 +/- 1.66E-05
	12	375.60	6.05E-01 +/- 1.33E-01	1.45E+00	3.13E-04 +/- 1.75E-05
	13	393.64	3.34E-01 +/- 8.16E-02	1.44E+00	3.01E-04 +/- 1.81E-05
	14	413.70	7.19E-01 +/- 9.25E-02	1.43E+00	2.89E-04 +/- 1.85E-05
	15	443.98	1.06E-01 +/- 4.13E-02	1.41E+00	2.72E-04 +/- 1.86E-05
	16	452.24	1.13E-01 +/- 4.50E-02	1.41E+00	2.67E-04 +/- 1.85E-05
	17	662.42	9.30E-02 +/- 4.97E-02	1.33E+00	1.86E-04 +/- 1.15E-05
	18	722.01	6.02E-02 +/- 3.42E-02	1.32E+00	1.71E-04 +/- 9.64E-06
	19	778.90	2.60E-02 +/- 1.50E-02	1.30E+00	1.59E-04 +/- 8.28E-06
	20	964.13	4.52E-02 +/- 3.54E-02	1.26E+00	1.32E-04 +/- 6.07E-06
	21	1001.03	3.46E-02 +/- 1.73E-02	1.26E+00	1.28E-04 +/- 5.83E-06
	22	1085.91	2.60E-02 +/- 1.50E-02	1.25E+00	1.20E-04 +/- 5.31E-06
	23	2224.41	5.98E-02 +/- 2.66E-02	1.17E+00	9.72E-05 +/- 5.30E-05
	24	2236.00	1.00E+02 +/- 1.50E+00	1.17E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 113.85 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.174 +/- 0.0104
SE-75	264.65	0.000 +/- 0.0000	0.307 +/- 0.0103
SE-75	279.53	0.000 +/- 0.0000	0.305 +/- 0.0146
SE-75	400.65	0.000 +/- 0.0000	0.372 +/- 0.0263

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.20	5.22E+00 +/- 7.37E-01	2.19E+00	3.95E-05 +/- 1.91E-05
	2	60.21	9.27E+01 +/- 1.55E+00	2.07E+00	8.09E-05 +/- 2.79E-05
	3	99.52	1.20E+00 +/- 6.20E-01	1.88E+00	2.97E-04 +/- 3.03E-05
	4	103.84	4.00E+00 +/- 3.88E-01	1.87E+00	3.19E-04 +/- 2.87E-05
M	5	125.94	1.48E+00 +/- 1.60E-01	1.82E+00	4.08E-04 +/- 2.27E-05
m	6	129.99	5.87E+00 +/- 3.85E-01	1.82E+00	4.20E-04 +/- 2.22E-05
	7	152.68	2.83E-01 +/- 1.83E-01	1.76E+00	4.70E-04 +/- 2.29E-05
	8	185.71	6.27E-01 +/- 1.89E-01	1.67E+00	4.95E-04 +/- 2.57E-05
	9	208.65	1.40E+00 +/- 2.30E-01	1.62E+00	4.92E-04 +/- 2.59E-05
	10	255.99	2.51E-01 +/- 1.12E-01	1.53E+00	4.58E-04 +/- 2.28E-05
	11	311.90	2.69E-01 +/- 1.07E-01	1.49E+00	4.04E-04 +/- 1.79E-05
M	12	333.29	5.62E-01 +/- 1.12E-01	1.47E+00	3.84E-04 +/- 1.63E-05
m	13	336.33	2.92E-01 +/- 7.22E-02	1.47E+00	3.81E-04 +/- 1.61E-05
	14	345.70	3.41E-01 +/- 1.01E-01	1.46E+00	3.72E-04 +/- 1.56E-05
	15	375.71	1.15E+00 +/- 1.59E-01	1.44E+00	3.46E-04 +/- 1.41E-05
	16	393.53	5.53E-01 +/- 9.95E-02	1.43E+00	3.32E-04 +/- 1.34E-05
	17	413.70	1.09E+00 +/- 1.17E-01	1.42E+00	3.16E-04 +/- 1.28E-05
	18	559.45	7.11E-02 +/- 3.23E-02	1.35E+00	2.32E-04 +/- 1.08E-05
	19	662.42	1.27E-01 +/- 3.92E-02	1.32E+00	1.95E-04 +/- 9.62E-06
	20	1001.03	8.67E-03 +/- 8.67E-03	1.25E+00	1.35E-04 +/- 5.37E-06
	21	1333.23	1.26E-01 +/- 3.71E-02	1.21E+00	1.17E-04 +/- 5.98E-06
	22	2236.00	1.00E+02 +/- 1.50E+00	1.17E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 113.76 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.260 +/- 0.0122
SE-75	264.65	0.000 +/- 0.0000	0.394 +/- 0.0119
SE-75	279.53	0.000 +/- 0.0000	0.375 +/- 0.0164
SE-75	400.65	0.000 +/- 0.0000	0.461 +/- 0.0293

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.87	5.24E-01 +/- 1.35E-01	2.32E+00	1.10E-07 +/- 6.80E-07
	2	50.29	3.16E+00 +/- 6.24E-01	1.87E+00	1.10E-05 +/- 2.72E-05
	3	60.22	9.83E+01 +/- 1.62E+00	1.79E+00	3.64E-05 +/- 5.78E-05
	4	99.77	4.98E+00 +/- 6.27E-01	1.65E+00	2.66E-04 +/- 6.25E-05
	5	103.80	2.88E+00 +/- 4.53E-01	1.64E+00	2.91E-04 +/- 5.34E-05
	6	111.65	8.21E-01 +/- 3.05E-01	1.63E+00	3.35E-04 +/- 3.63E-05
M	7	125.95	1.50E+00 +/- 1.60E-01	1.61E+00	3.99E-04 +/- 2.37E-05
m	8	129.99	6.78E+00 +/- 4.10E-01	1.60E+00	4.14E-04 +/- 2.68E-05
	9	152.68	7.16E-01 +/- 2.02E-01	1.56E+00	4.70E-04 +/- 4.99E-05
	10	185.71	1.19E+00 +/- 2.01E-01	1.50E+00	4.90E-04 +/- 5.73E-05
	11	208.71	1.80E+00 +/- 2.06E-01	1.47E+00	4.80E-04 +/- 5.04E-05
	12	311.90	3.22E-01 +/- 9.43E-02	1.39E+00	3.77E-04 +/- 1.75E-05
	13	333.56	8.39E-01 +/- 1.39E-01	1.37E+00	3.57E-04 +/- 1.65E-05
	14	345.80	3.77E-01 +/- 1.02E-01	1.36E+00	3.46E-04 +/- 1.65E-05
	15	369.19	1.36E-01 +/- 8.16E-02	1.35E+00	3.26E-04 +/- 1.70E-05
	16	375.74	9.36E-01 +/- 1.62E-01	1.34E+00	3.21E-04 +/- 1.71E-05
	17	393.49	3.44E-01 +/- 9.34E-02	1.33E+00	3.08E-04 +/- 1.75E-05
	18	413.70	1.16E+00 +/- 1.22E-01	1.32E+00	2.94E-04 +/- 1.78E-05
	19	443.98	9.98E-02 +/- 5.39E-02	1.31E+00	2.75E-04 +/- 1.78E-05
	20	451.96	2.05E-01 +/- 4.83E-02	1.30E+00	2.70E-04 +/- 1.78E-05
	21	662.42	1.43E-01 +/- 5.32E-02	1.25E+00	1.90E-04 +/- 1.13E-05
	22	1001.03	3.12E-02 +/- 2.35E-02	1.19E+00	1.37E-04 +/- 6.33E-06
	23	1112.12	2.60E-02 +/- 1.50E-02	1.18E+00	1.26E-04 +/- 5.66E-06
	24	1408.01	1.73E-02 +/- 1.23E-02	1.16E+00	1.06E-04 +/- 7.05E-06
	25	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	7.00E-05 +/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 113.77 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.298 +/- 0.0124
SE-75	264.65	0.000 +/- 0.0000	0.428 +/- 0.0128
SE-75	279.53	0.000 +/- 0.0000	0.442 +/- 0.0182
SE-75	400.65	0.000 +/- 0.0000	0.461 +/- 0.0298

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.32	5.01E-01 +/- 1.27E-01	2.14E+00	3.06E-07 +/- 1.99E-06
	2	50.11	5.42E+00 +/- 7.89E-01	1.77E+00	1.61E-05 +/- 4.34E-05
	3	60.20	9.76E+01 +/- 1.63E+00	1.69E+00	4.81E-05 +/- 8.24E-05
	4	99.56	3.13E+00 +/- 6.52E-01	1.58E+00	2.79E-04 +/- 7.05E-05
	5	103.82	3.13E+00 +/- 4.23E-01	1.57E+00	3.02E-04 +/- 5.87E-05
	6	111.70	9.42E-01 +/- 3.10E-01	1.56E+00	3.41E-04 +/- 3.82E-05
M	7	126.07	1.86E+00 +/- 1.93E-01	1.54E+00	3.97E-04 +/- 2.37E-05
m	8	130.02	5.69E+00 +/- 3.84E-01	1.54E+00	4.09E-04 +/- 2.73E-05
	9	152.68	5.29E-01 +/- 1.95E-01	1.50E+00	4.54E-04 +/- 5.17E-05
	10	185.71	6.65E-01 +/- 2.46E-01	1.45E+00	4.66E-04 +/- 5.86E-05
	11	208.66	1.70E+00 +/- 2.28E-01	1.42E+00	4.56E-04 +/- 5.12E-05
	12	311.90	2.55E-01 +/- 1.23E-01	1.34E+00	3.62E-04 +/- 1.74E-05
	13	333.19	8.73E-01 +/- 1.23E-01	1.33E+00	3.44E-04 +/- 1.67E-05
	14	345.66	5.29E-01 +/- 1.26E-01	1.33E+00	3.33E-04 +/- 1.69E-05
	15	369.02	2.52E-01 +/- 1.09E-01	1.33E+00	3.16E-04 +/- 1.77E-05
	16	375.82	1.08E+00 +/- 1.31E-01	1.33E+00	3.11E-04 +/- 1.79E-05
	17	393.65	4.93E-01 +/- 9.29E-02	1.32E+00	2.99E-04 +/- 1.85E-05
	18	413.70	1.10E+00 +/- 1.23E-01	1.32E+00	2.86E-04 +/- 1.90E-05
	19	511.72	1.50E-01 +/- 5.69E-02	1.29E+00	2.37E-04 +/- 1.79E-05
	20	662.42	1.31E-01 +/- 3.38E-02	1.25E+00	1.90E-04 +/- 1.21E-05
	21	1085.91	3.49E-02 +/- 1.75E-02	1.18E+00	1.26E-04 +/- 5.69E-06
	22	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 113.61 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.243 +/- 0.0122
SE-75	264.65	0.000 +/- 0.0000	0.359 +/- 0.0115
SE-75	279.53	0.000 +/- 0.0000	0.391 +/- 0.0170
SE-75	400.65	0.000 +/- 0.0000	0.380 +/- 0.0276

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.91	4.50E-01 +/- 1.46E-01	2.40E+00	4.49E-07 +/- 2.84E-06
	2	50.03	7.61E+00 +/- 8.69E-01	1.93E+00	2.17E-05 +/- 5.60E-05
	3	60.21	1.32E+02 +/- 2.03E+00	1.83E+00	6.10E-05 +/- 9.95E-05
	4	99.48	7.12E+00 +/- 5.50E-01	1.69E+00	3.07E-04 +/- 7.46E-05
	5	111.66	1.63E+00 +/- 3.41E-01	1.67E+00	3.68E-04 +/- 4.00E-05
M	6	126.00	1.92E+00 +/- 1.87E-01	1.64E+00	4.22E-04 +/- 2.47E-05
m	7	130.00	7.33E+00 +/- 4.25E-01	1.64E+00	4.33E-04 +/- 2.80E-05
	8	185.71	7.22E-01 +/- 1.84E-01	1.54E+00	4.84E-04 +/- 5.81E-05
	9	208.70	2.21E+00 +/- 2.59E-01	1.51E+00	4.72E-04 +/- 5.09E-05
	10	311.90	3.93E-01 +/- 1.12E-01	1.40E+00	3.82E-04 +/- 1.81E-05
M	11	333.39	7.25E-01 +/- 1.29E-01	1.40E+00	3.65E-04 +/- 1.73E-05
m	12	336.20	3.26E-01 +/- 7.79E-02	1.40E+00	3.63E-04 +/- 1.73E-05
	13	345.65	5.42E-01 +/- 1.26E-01	1.41E+00	3.55E-04 +/- 1.74E-05
	14	375.68	1.22E+00 +/- 1.84E-01	1.41E+00	3.34E-04 +/- 1.84E-05
	15	380.96	5.32E-01 +/- 1.06E-01	1.41E+00	3.30E-04 +/- 1.86E-05
	16	393.59	5.10E-01 +/- 9.11E-02	1.41E+00	3.22E-04 +/- 1.90E-05
	17	400.66	6.94E-02 +/- 4.79E-02	1.41E+00	3.17E-04 +/- 1.92E-05
	18	413.70	1.37E+00 +/- 1.28E-01	1.41E+00	3.09E-04 +/- 1.95E-05
	19	443.98	8.24E-02 +/- 4.52E-02	1.39E+00	2.92E-04 +/- 1.97E-05
	20	452.18	7.37E-02 +/- 4.77E-02	1.39E+00	2.88E-04 +/- 1.97E-05
	21	662.42	6.49E-02 +/- 4.50E-02	1.31E+00	2.10E-04 +/- 1.26E-05
	22	722.01	8.87E-02 +/- 4.70E-02	1.30E+00	1.95E-04 +/- 1.05E-05
	23	1001.03	3.30E-02 +/- 2.31E-02	1.25E+00	1.45E-04 +/- 6.25E-06
	24	1085.91	8.68E-03 +/- 8.68E-03	1.23E+00	1.34E-04 +/- 5.68E-06
	25	1408.01	1.74E-02 +/- 1.23E-02	1.20E+00	9.88E-05 +/- 6.79E-06
	26	2236.00	1.00E+02 +/- 1.50E+00	1.16E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 113.41 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.190 +/- 0.0105
SE-75	264.65	0.000 +/- 0.0000	0.277 +/- 0.0097
SE-75	279.53	0.000 +/- 0.0000	0.276 +/- 0.0145
SE-75	400.65	0.000 +/- 0.0000	0.270 +/- 0.0221

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.21	3.35E-01 +/- 1.31E-01	2.69E+00	5.42E-09 +/- 3.08E-08
	2	50.43	1.03E+01 +/- 1.03E+00	2.12E+00	3.11E-06 +/- 7.20E-06
	3	60.21	1.79E+02 +/- 2.59E+00	2.01E+00	1.61E-05 +/- 2.40E-05
	4	99.47	8.32E+00 +/- 5.92E-01	1.83E+00	2.44E-04 +/- 5.50E-05
	5	111.68	1.37E+00 +/- 3.64E-01	1.80E+00	3.35E-04 +/- 3.49E-05
M	6	126.06	2.48E+00 +/- 2.10E-01	1.78E+00	4.25E-04 +/- 2.46E-05
m	7	129.98	7.91E+00 +/- 4.42E-01	1.77E+00	4.45E-04 +/- 2.77E-05
	8	148.57	5.12E-01 +/- 1.91E-01	1.74E+00	5.16E-04 +/- 4.85E-05
	9	185.71	8.19E-01 +/- 2.12E-01	1.67E+00	5.59E-04 +/- 6.06E-05
	10	208.73	2.65E+00 +/- 2.71E-01	1.64E+00	5.47E-04 +/- 5.32E-05
M	11	333.42	9.66E-01 +/- 1.39E-01	1.57E+00	3.91E-04 +/- 1.76E-05
m	12	336.23	5.13E-01 +/- 9.14E-02	1.57E+00	3.88E-04 +/- 1.76E-05
	13	345.70	5.86E-01 +/- 1.23E-01	1.57E+00	3.78E-04 +/- 1.76E-05
	14	369.00	2.20E-01 +/- 9.18E-02	1.57E+00	3.55E-04 +/- 1.81E-05
	15	375.67	1.26E+00 +/- 1.93E-01	1.58E+00	3.49E-04 +/- 1.82E-05
M	16	380.92	1.85E-01 +/- 7.58E-02	1.58E+00	3.44E-04 +/- 1.83E-05
m	17	383.29	2.16E-01 +/- 8.02E-02	1.58E+00	3.42E-04 +/- 1.84E-05
	18	393.57	5.46E-01 +/- 9.83E-02	1.58E+00	3.33E-04 +/- 1.86E-05
	19	413.70	1.64E+00 +/- 1.41E-01	1.57E+00	3.17E-04 +/- 1.88E-05
	20	451.94	1.96E-01 +/- 6.68E-02	1.54E+00	2.90E-04 +/- 1.86E-05
	21	511.63	1.99E-01 +/- 6.53E-02	1.51E+00	2.57E-04 +/- 1.71E-05
	22	662.42	8.50E-02 +/- 4.61E-02	1.44E+00	2.03E-04 +/- 1.17E-05
	23	964.13	4.63E-02 +/- 2.78E-02	1.35E+00	1.49E-04 +/- 6.59E-06
	24	1085.91	4.54E-02 +/- 2.26E-02	1.32E+00	1.35E-04 +/- 5.76E-06
	25	2236.00	1.00E+02 +/- 1.50E+00	1.23E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 113.47 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.195 +/- 0.0108
SE-75	264.65	0.000 +/- 0.0000	0.299 +/- 0.0100
SE-75	279.53	0.000 +/- 0.0000	0.330 +/- 0.0154
SE-75	400.65	0.000 +/- 0.0000	0.334 +/- 0.0241

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.12	3.66E-01 +/- 1.18E-01	2.66E+00	7.74E-06 +/- 7.51E-06
	2	50.35	4.98E+00 +/- 7.93E-01	2.10E+00	6.08E-05 +/- 2.96E-05
	3	60.21	1.75E+02 +/- 2.54E+00	1.99E+00	1.10E-04 +/- 3.84E-05
	4	99.45	6.65E+00 +/- 5.28E-01	1.81E+00	3.25E-04 +/- 3.30E-05
	5	115.56	1.30E+00 +/- 3.60E-01	1.78E+00	3.88E-04 +/- 2.58E-05
M	6	123.55	5.13E-01 +/- 1.16E-01	1.77E+00	4.13E-04 +/- 2.35E-05
m	7	126.00	2.45E+00 +/- 1.98E-01	1.76E+00	4.19E-04 +/- 2.31E-05
m	8	129.99	8.28E+00 +/- 4.37E-01	1.76E+00	4.29E-04 +/- 2.26E-05
	9	148.57	3.47E-01 +/- 1.95E-01	1.72E+00	4.62E-04 +/- 2.28E-05
	10	185.71	4.52E-01 +/- 1.71E-01	1.65E+00	4.81E-04 +/- 2.59E-05
	11	204.18	5.57E-01 +/- 1.85E-01	1.62E+00	4.76E-04 +/- 2.61E-05
	12	208.68	1.69E+00 +/- 2.78E-01	1.61E+00	4.74E-04 +/- 2.60E-05
	13	244.70	2.56E-01 +/- 1.30E-01	1.55E+00	4.49E-04 +/- 2.38E-05
	14	279.54	1.60E-01 +/- 9.52E-02	1.48E+00	4.18E-04 +/- 2.07E-05
	15	311.90	1.58E-01 +/- 9.19E-02	1.48E+00	3.88E-04 +/- 1.78E-05
M	16	333.39	7.54E-01 +/- 1.26E-01	1.48E+00	3.69E-04 +/- 1.62E-05
m	17	336.11	4.24E-01 +/- 8.74E-02	1.48E+00	3.67E-04 +/- 1.60E-05
	18	345.70	4.50E-01 +/- 1.05E-01	1.48E+00	3.59E-04 +/- 1.54E-05
	19	369.05	2.07E-01 +/- 8.92E-02	1.47E+00	3.39E-04 +/- 1.41E-05
	20	375.66	1.64E+00 +/- 1.52E-01	1.47E+00	3.34E-04 +/- 1.38E-05
	21	393.65	5.69E-01 +/- 8.91E-02	1.47E+00	3.21E-04 +/- 1.31E-05
	22	413.70	1.47E+00 +/- 1.27E-01	1.47E+00	3.06E-04 +/- 1.25E-05
	23	443.98	7.49E-02 +/- 5.72E-02	1.45E+00	2.87E-04 +/- 1.18E-05
	24	662.42	1.82E-01 +/- 5.56E-02	1.36E+00	1.93E-04 +/- 9.41E-06
	25	722.01	5.22E-02 +/- 2.75E-02	1.34E+00	1.78E-04 +/- 8.71E-06
	26	1408.01	2.61E-02 +/- 1.51E-02	1.23E+00	1.13E-04 +/- 7.00E-06
	27	2236.00	1.00E+02 +/- 1.50E+00	1.19E+00	1.19E-04 +/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 113.54 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.295 +/- 0.0130
SE-75	264.65	0.000 +/- 0.0000	0.403 +/- 0.0122
SE-75	279.53	0.000 +/- 0.0000	0.395 +/- 0.0173
SE-75	400.65	0.000 +/- 0.0000	0.433 +/- 0.0282

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.03	2.00E-01 +/- 1.38E-01	2.17E+00	6.15E-09 +/- 3.70E-08
	2	50.11	7.87E+00 +/- 8.28E-01	1.78E+00	3.13E-06 +/- 7.69E-06
	3	60.21	1.66E+02 +/- 2.44E+00	1.70E+00	1.66E-05 +/- 2.59E-05
	4	99.49	8.31E+00 +/- 5.07E-01	1.58E+00	2.37E-04 +/- 5.56E-05
	5	103.81	6.38E+00 +/- 4.14E-01	1.58E+00	2.68E-04 +/- 4.85E-05
	6	111.75	8.63E-01 +/- 3.02E-01	1.56E+00	3.22E-04 +/- 3.45E-05
	7	115.20	7.46E-01 +/- 3.25E-01	1.56E+00	3.44E-04 +/- 2.92E-05
M	8	126.02	1.95E+00 +/- 1.90E-01	1.55E+00	4.05E-04 +/- 2.41E-05
m	9	130.02	7.08E+00 +/- 4.19E-01	1.54E+00	4.24E-04 +/- 2.73E-05
	10	136.00	4.11E-01 +/- 1.68E-01	1.47E+00	4.49E-04 +/- 3.41E-05
	11	148.57	3.60E-01 +/- 2.24E-01	1.52E+00	4.88E-04 +/- 4.79E-05
	12	185.71	2.14E-01 +/- 1.41E-01	1.47E+00	5.24E-04 +/- 5.91E-05
	13	204.19	6.64E-01 +/- 1.45E-01	1.45E+00	5.14E-04 +/- 5.34E-05
	14	208.65	1.62E+00 +/- 2.64E-01	1.44E+00	5.11E-04 +/- 5.15E-05
	15	244.70	2.29E-01 +/- 1.31E-01	1.40E+00	4.69E-04 +/- 3.50E-05
	16	311.90	3.29E-01 +/- 1.07E-01	1.38E+00	3.83E-04 +/- 1.78E-05
M	17	333.34	7.26E-01 +/- 1.21E-01	1.37E+00	3.59E-04 +/- 1.71E-05
m	18	336.03	3.91E-01 +/- 7.96E-02	1.37E+00	3.56E-04 +/- 1.71E-05
	19	345.65	5.41E-01 +/- 1.14E-01	1.37E+00	3.46E-04 +/- 1.72E-05
	20	375.69	1.28E+00 +/- 1.90E-01	1.36E+00	3.18E-04 +/- 1.78E-05
	21	380.68	3.88E-01 +/- 1.05E-01	1.36E+00	3.14E-04 +/- 1.79E-05
	22	393.52	4.94E-01 +/- 9.19E-02	1.35E+00	3.03E-04 +/- 1.81E-05
	23	413.70	1.52E+00 +/- 1.27E-01	1.35E+00	2.88E-04 +/- 1.83E-05
	24	452.26	1.22E-01 +/- 6.01E-02	1.33E+00	2.63E-04 +/- 1.81E-05
	25	662.42	9.24E-02 +/- 4.92E-02	1.27E+00	1.84E-04 +/- 1.12E-05
	26	722.01	6.83E-02 +/- 4.11E-02	1.26E+00	1.72E-04 +/- 9.44E-06
	27	778.90	2.34E-02 +/- 2.18E-02	1.24E+00	1.62E-04 +/- 8.21E-06
	28	2236.00	1.00E+02 +/- 1.50E+00	1.14E+00	6.12E-05 +/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 113.83 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.263 +/- 0.0115
SE-75	264.65	0.000 +/- 0.0000	0.336 +/- 0.0108
SE-75	279.53	0.000 +/- 0.0000	0.351 +/- 0.0157
SE-75	400.65	0.000 +/- 0.0000	0.409 +/- 0.0269

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	49.86	4.67E+00 +/- 7.63E-01	1.87E+00	8.32E-05 +/- 4.20E-05
	2	60.21	1.09E+02 +/- 1.74E+00	1.78E+00	1.38E-04 +/- 4.88E-05
	3	99.47	4.36E+00 +/- 4.34E-01	1.64E+00	3.30E-04 +/- 3.40E-05
	4	115.39	4.97E-01 +/- 3.18E-01	1.62E+00	3.82E-04 +/- 2.58E-05
M	5	126.01	1.52E+00 +/- 1.60E-01	1.60E+00	4.08E-04 +/- 2.27E-05
m	6	130.01	4.59E+00 +/- 3.34E-01	1.60E+00	4.16E-04 +/- 2.21E-05
	7	148.57	1.33E+00 +/- 2.23E-01	1.58E+00	4.43E-04 +/- 2.22E-05
	8	204.25	4.30E-01 +/- 1.31E-01	1.52E+00	4.57E-04 +/- 2.52E-05
	9	208.69	9.91E-01 +/- 2.28E-01	1.52E+00	4.56E-04 +/- 2.51E-05
	10	311.90	1.39E-01 +/- 9.54E-02	1.43E+00	3.87E-04 +/- 1.76E-05
M	11	333.40	3.82E-01 +/- 8.95E-02	1.42E+00	3.71E-04 +/- 1.62E-05
m	12	336.20	2.58E-01 +/- 7.02E-02	1.41E+00	3.69E-04 +/- 1.60E-05
	13	345.58	3.18E-01 +/- 9.87E-02	1.41E+00	3.62E-04 +/- 1.54E-05
	14	369.12	1.99E-01 +/- 8.28E-02	1.39E+00	3.45E-04 +/- 1.43E-05
	15	375.73	7.99E-01 +/- 1.40E-01	1.39E+00	3.40E-04 +/- 1.40E-05
	16	383.85	1.98E-01 +/- 1.07E-01	1.39E+00	3.35E-04 +/- 1.37E-05
	17	393.68	3.14E-01 +/- 7.16E-02	1.38E+00	3.28E-04 +/- 1.34E-05
	18	413.70	6.32E-01 +/- 1.00E-01	1.37E+00	3.15E-04 +/- 1.29E-05
	19	443.98	5.20E-02 +/- 3.43E-02	1.36E+00	2.97E-04 +/- 1.23E-05
	20	778.90	8.67E-03 +/- 8.67E-03	1.26E+00	1.76E-04 +/- 8.75E-06
	21	964.13	4.09E-02 +/- 2.95E-02	1.23E+00	1.45E-04 +/- 6.11E-06
	22	1408.01	8.67E-03 +/- 8.67E-03	1.19E+00	1.09E-04 +/- 6.83E-06
	23	2236.00	1.00E+02 +/- 1.50E+00	1.15E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 114.16 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.395 +/- 0.0145
SE-75	264.65	0.000 +/- 0.0000	0.488 +/- 0.0138
SE-75	279.53	0.000 +/- 0.0000	0.490 +/- 0.0193
SE-75	400.65	0.000 +/- 0.0000	0.550 +/- 0.0313

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.27	2.98E+00 +/- 5.24E-01	1.57E+00	5.97E-04 +/- 1.57E-03
	2	60.21	4.09E+01 +/- 8.82E-01	1.51E+00	5.03E-04 +/- 8.45E-04
	3	99.42	1.56E+00 +/- 2.95E-01	1.43E+00	4.09E-04 +/- 1.03E-04
M	4	126.00	4.40E-01 +/- 9.88E-02	1.40E+00	4.00E-04 +/- 2.38E-05
m	5	130.00	1.84E+00 +/- 2.21E-01	1.40E+00	3.99E-04 +/- 2.64E-05
	6	185.71	1.98E-01 +/- 1.19E-01	1.35E+00	3.93E-04 +/- 4.88E-05
	7	208.77	5.24E-01 +/- 1.36E-01	1.33E+00	3.88E-04 +/- 4.33E-05
	8	264.66	8.40E-02 +/- 5.47E-02	1.30E+00	3.71E-04 +/- 2.52E-05
M	9	333.08	1.95E-01 +/- 7.15E-02	1.27E+00	3.44E-04 +/- 1.63E-05
m	10	336.57	8.39E-02 +/- 4.18E-02	1.27E+00	3.42E-04 +/- 1.63E-05
	11	346.21	1.55E-01 +/- 6.08E-02	1.27E+00	3.38E-04 +/- 1.66E-05
	12	375.66	3.02E-01 +/- 8.45E-02	1.25E+00	3.25E-04 +/- 1.79E-05
	13	393.67	7.48E-02 +/- 4.84E-02	1.25E+00	3.17E-04 +/- 1.87E-05
	14	413.70	3.52E-01 +/- 7.09E-02	1.24E+00	3.08E-04 +/- 1.94E-05
	15	722.01	3.33E-02 +/- 2.26E-02	1.18E+00	1.97E-04 +/- 1.08E-05
	16	867.39	2.59E-02 +/- 1.50E-02	1.16E+00	1.63E-04 +/- 7.48E-06
	17	1001.03	2.94E-02 +/- 2.46E-02	1.15E+00	1.39E-04 +/- 6.19E-06
	18	2236.00	1.00E+02 +/- 1.50E+00	1.10E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 114.28 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.446 +/- 0.0157
SE-75	264.65	0.000 +/- 0.0000	0.554 +/- 0.0151
SE-75	279.53	0.000 +/- 0.0000	0.567 +/- 0.0209
SE-75	400.65	0.000 +/- 0.0000	0.594 +/- 0.0332

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.23	1.39E+01 +/- 4.88E-01	1.44E+00	1.31E-05 +/- 2.09E-05
2	99.45	4.06E-01 +/- 1.64E-01	1.37E+00	2.33E-04 +/- 5.59E-05
3	129.29	5.91E-01 +/- 1.68E-01	1.34E+00	4.34E-04 +/- 2.74E-05
4	185.71	1.91E-01 +/- 1.29E-01	1.29E+00	5.47E-04 +/- 6.36E-05
5	375.93	1.80E-01 +/- 5.67E-02	1.21E+00	3.19E-04 +/- 1.79E-05
6	413.70	1.96E-01 +/- 4.97E-02	1.21E+00	2.87E-04 +/- 1.84E-05
7	2236.00	1.00E+02 +/- 1.49E+00	1.09E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 114.35 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.406 +/- 0.0143
SE-75	264.65	0.000 +/- 0.0000	0.487 +/- 0.0136
SE-75	279.53	0.000 +/- 0.0000	0.511 +/- 0.0193
SE-75	400.65	0.000 +/- 0.0000	0.553 +/- 0.0313

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.22	6.16E+00 +/- 3.58E-01	1.50E+00	2.30E-05 +/- 3.89E-05
2	129.29	3.88E-01 +/- 1.32E-01	1.39E+00	4.16E-04 +/- 2.70E-05
3	152.68	1.93E-01 +/- 1.09E-01	1.37E+00	4.81E-04 +/- 5.38E-05
4	375.57	9.56E-02 +/- 4.43E-02	1.25E+00	3.16E-04 +/- 1.85E-05
5	413.70	8.41E-02 +/- 4.91E-02	1.24E+00	2.89E-04 +/- 1.94E-05
6	559.20	7.09E-02 +/- 2.70E-02	1.20E+00	2.21E-04 +/- 1.63E-05
7	867.39	2.32E-02 +/- 2.14E-02	1.16E+00	1.57E-04 +/- 7.21E-06
8	1085.91	1.73E-02 +/- 1.22E-02	1.14E+00	1.32E-04 +/- 5.78E-06
9	1112.12	2.59E-02 +/- 1.49E-02	1.14E+00	1.30E-04 +/- 5.64E-06
10	1408.01	1.94E-02 +/- 1.91E-02	1.12E+00	1.05E-04 +/- 7.00E-06
11	2236.00	1.00E+02 +/- 1.49E+00	1.10E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 114.36 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.292 +/- 0.0120
SE-75	264.65	0.000 +/- 0.0000	0.384 +/- 0.0116
SE-75	279.53	0.000 +/- 0.0000	0.367 +/- 0.0162
SE-75	400.65	0.000 +/- 0.0000	0.439 +/- 0.0274

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.20	2.79E+00 +/- 2.93E-01	1.71E+00	9.61E-05 +/- 1.50E-04
2	185.71	1.52E-01 +/- 8.61E-02	1.48E+00	4.64E-04 +/- 5.33E-05
3	300.10	1.35E-01 +/- 5.77E-02	1.41E+00	3.81E-04 +/- 1.84E-05
4	867.39	3.88E-02 +/- 2.53E-02	1.23E+00	1.55E-04 +/- 7.11E-06
5	2236.00	1.00E+02 +/- 1.49E+00	1.14E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.35 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.327 +/- 0.0124
SE-75	264.65	0.000 +/- 0.0000	0.440 +/- 0.0127
SE-75	279.53	0.000 +/- 0.0000	0.452 +/- 0.0182
SE-75	400.65	0.000 +/- 0.0000	0.483 +/- 0.0292

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.21	2.28E+00 +/- 2.39E-01	1.63E+00	1.24E-05 +/- 2.04E-05
2	129.29	2.58E-01 +/- 1.27E-01	1.49E+00	4.21E-04 +/- 2.67E-05
3	196.54	9.72E-02 +/- 6.24E-02	1.41E+00	4.94E-04 +/- 5.75E-05
4	279.54	1.86E-01 +/- 5.80E-02	1.33E+00	3.85E-04 +/- 2.22E-05
5	400.66	9.71E-02 +/- 4.74E-02	1.30E+00	2.70E-04 +/- 1.63E-05
6	413.70	8.89E-02 +/- 4.10E-02	1.30E+00	2.62E-04 +/- 1.65E-05
7	1001.03	2.93E-02 +/- 2.45E-02	1.18E+00	1.29E-04 +/- 5.86E-06
8	2236.00	1.00E+02 +/- 1.49E+00	1.12E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.38 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.509 +/- 0.0165
SE-75	264.65	0.000 +/- 0.0000	0.593 +/- 0.0158
SE-75	279.53	0.000 +/- 0.0000	0.610 +/- 0.0215
SE-75	400.65	0.000 +/- 0.0000	0.588 +/- 0.0323

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.21	7.32E-01 +/- 1.61E-01	1.36E+00	5.63E-05 +/- 2.42E-05
2	413.70	6.31E-02 +/- 3.81E-02	1.21E+00	1.79E-04 +/- 8.85E-06
3	662.42	2.58E-02 +/- 1.49E-02	1.17E+00	1.15E-04 +/- 7.04E-06
4	964.13	2.58E-02 +/- 1.49E-02	1.13E+00	8.21E-05 +/- 4.35E-06
5	1173.85	9.42E-02 +/- 3.14E-02	1.12E+00	7.13E-05 +/- 3.33E-06
6	1408.01	1.72E-02 +/- 1.22E-02	1.11E+00	6.48E-05 +/- 4.76E-06
7	2236.00	1.00E+02 +/- 1.49E+00	1.09E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85801034
Peak Locate Performed on: 8-28-07 5:55:47 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.76	0.2132	32.04	9.82
2	100.87	0.1650	50.10	12.69
3	121.09	0.0397	60.21	275.70
4	199.68	0.0859	99.51	55.91
5	224.05	0.1428	111.69	20.74
6	248.00	0.0817	123.81	61.96
7	252.90	0.0817	126.01	61.96
8	260.70	0.0817	129.99	61.96
9	299.36	0.2091	149.35	10.81
10	330.67	0.2857	165.00	5.41
11	373.51	0.1554	186.42	16.27
12	393.29	0.2779	196.31	5.62
13	409.10	0.1571	204.21	17.36
14	418.04	0.1025	208.68	39.80
15	625.62	0.2193	312.48	7.46
16	667.28	0.1535	333.40	17.08
17	673.53	0.2462	336.21	8.22
18	692.02	0.1512	345.68	17.89
19	752.05	0.1150	375.69	29.95
20	762.18	0.2331	380.97	8.60
21	767.82	0.2493	383.40	7.44
22	787.82	0.1558	393.58	15.27
23	829.44	0.1127	414.39	27.78
24	847.05	0.2507	423.19	6.12
25	904.80	0.2021	452.06	9.36
26	1023.77	0.2265	511.55	5.15
27	1118.90	0.2451	559.12	6.13
28	1326.77	0.2392	663.05	5.39
29	1445.38	0.2665	722.36	5.42
30	2348.56	0.2267	1173.95	6.02
31	2667.41	0.2262	1333.37	5.63
32	4449.83	0.2186	2224.58	5.74
33	4471.73	0.0265	2235.53	410.48

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85801034
Peak Analysis Performed on: 8-28-07 5:55:47 PM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	61-	67	64.76	32.04	3.49E+02	39.51	5.30E+02
	2	94-	104	100.87	50.10	5.24E+03	252.69	2.30E+04
	3	114-	127	121.09	60.21	1.42E+05	464.73	2.65E+04
	4	194-	203	199.68	99.51	7.05E+03	187.06	1.24E+04
	5	217-	227	224.05	111.69	1.05E+03	118.71	5.36E+03
M	6	245-	267	248.28	123.81	4.81E+02	43.24	2.14E+03
m	7	245-	267	252.69	126.01	2.22E+03	66.30	2.28E+03
m	8	245-	267	260.65	129.99	7.32E+03	138.34	1.84E+03
	9	293-	303	299.36	149.35	4.08E+02	86.39	2.95E+03
	10	328-	333	330.67	165.00	1.39E+02	46.67	1.15E+03
	11	368-	377	373.51	186.42	6.51E+02	65.34	1.61E+03
	12	389-	400	393.29	196.31	2.36E+02	63.51	1.51E+03
	13	403-	412	409.10	204.21	6.54E+02	61.31	1.38E+03
	14	412-	425	418.04	208.68	1.74E+03	96.54	2.60E+03
	15	618-	630	625.62	312.48	1.90E+02	42.64	6.20E+02
M	16	661-	679	667.46	333.40	7.45E+02	46.24	4.03E+02
m	17	661-	679	673.09	336.21	3.54E+02	28.74	3.80E+02
	18	688-	699	692.02	345.68	4.90E+02	42.48	5.15E+02
	19	746-	759	752.05	375.69	1.21E+03	61.06	8.62E+02
M	20	759-	775	762.60	380.97	2.24E+02	27.27	2.85E+02
m	21	759-	775	767.46	383.40	2.30E+02	26.58	2.50E+02
	22	780-	795	787.82	393.58	5.60E+02	37.54	2.83E+02
	23	821-	837	829.44	414.39	1.37E+03	48.44	3.11E+02
	24	843-	852	847.05	423.19	7.10E+01	22.95	2.00E+02
	25	899-	912	904.80	452.06	1.90E+02	24.61	1.49E+02
	26	1015-	1031	1023.77	511.55	3.54E+02	28.02	1.38E+02
	27	1110-	1126	1118.90	559.12	1.08E+02	20.97	1.06E+02
	28	1321-	1332	1326.77	663.05	1.17E+02	18.03	8.32E+01
	29	1441-	1453	1445.38	722.36	3.76E+01	16.60	9.04E+01
	30	2339-	2357	2348.56	1173.95	1.29E+02	16.95	4.70E+01
	31	2658-	2676	2667.41	1333.37	1.15E+02	16.66	4.69E+01
	32	4442-	4456	4449.83	2224.58	7.73E+01	9.70	5.67E+00
	33	4465-	4477	4471.73	2235.53	1.85E+05	430.38	9.82E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85801034
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.984	2236.00*	100.00	7.713E+02	1.823E+02
U-235	0.965	185.71*	57.20	9.513E-01	9.804E-02
Np-237	0.743	300.10	6.63		
		311.90*	38.60	4.807E-01	1.081E-01
Pu-239	0.967	413.70*	0.00	1.101E+05	4.392E+03
Pu-239A	0.966	129.29*	0.01	1.184E+05	3.640E+03
Am-241	0.972	662.42*	0.00	5.040E+04	7.798E+03
Am-241D	0.991	722.01*	0.00	3.546E+04	1.564E+04
Pu-241	0.958	148.57*	0.00	1.975E+05	4.204E+04

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-28-07 5:55:47 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
	1	32.04	3.0288E+00	11.33
	2	50.10	4.5469E+01	4.83
	3	60.21	1.2325E+03	0.41
	4	99.51	6.1213E+01	2.67
	5	111.69	9.1519E+00	11.26
M	6	123.81	4.1757E+00	8.99
m	7	126.01	1.9247E+01	3.00
	10	165.00	1.2049E+00	33.63
	12	196.31	2.0492E+00	26.91
	13	204.21	5.6772E+00	9.38
	14	208.68	1.5097E+01	5.56
M	16	333.40	6.4694E+00	6.21
m	17	336.21	3.0702E+00	8.13
	18	345.68	4.2542E+00	8.67
	19	375.69	1.0496E+01	5.06
M	20	380.97	1.9460E+00	12.17
m	21	383.40	2.0000E+00	11.54
	22	393.58	4.8581E+00	6.71
	24	423.19	6.1604E-01	32.34
	25	452.06	1.6520E+00	12.94
	26	511.55	3.0728E+00	7.92
	27	559.12	9.3617E-01	19.45
	30	1173.95	1.1197E+00	13.15
	31	1333.37	9.9882E-01	14.48
	32	2224.58	6.7128E-01	12.55

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.28E+02	+/-	1.22E+02		2.21E-02	+/-	3.26E-03
SE-75	<	6.03E-02	+/-	3.79E-03	<	1.61E-06	+/-	1.01E-07
EU-152x		6.52E-02	+/-	2.04E-02		1.74E-06	+/-	5.46E-07
U-233		1.57E+03	+/-	6.51E+02		4.19E-02	+/-	1.74E-02
U-235		8.39E-01	+/-	9.15E-02		2.24E-05	+/-	2.45E-06
Np-237		4.80E-01	+/-	7.21E-02		1.28E-05	+/-	1.93E-06
Pu-238		1.65E+04	+/-	3.59E+03		4.42E-01	+/-	9.59E-02
U-238		4.79E+00	+/-	1.47E+00		1.28E-04	+/-	3.94E-05
Pu-239		1.01E+05	+/-	3.84E+03		2.69E+00	+/-	1.03E-01
Pu-239A		1.06E+05	+/-	3.00E+03		2.84E+00	+/-	8.03E-02
Am-241		4.40E+04	+/-	6.28E+03		1.18E+00	+/-	1.68E-01
Am-241D		2.96E+04	+/-	7.82E+03		7.91E-01	+/-	2.09E-01
Pu-241		1.61E+05	+/-	2.47E+04		4.30E+00	+/-	6.60E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-233	1.63E-01	+/-	6.77E-02
U-235	3.89E-01	+/-	4.24E-02
Np-237	6.82E-04	+/-	1.02E-04
Pu-238	9.66E-04	+/-	2.09E-04
U-238	1.43E+01	+/-	4.39E+00
Pu-239	1.62E+00	+/-	6.19E-02
Pu-239A	1.71E+00	+/-	4.84E-02
Am-241	1.28E-02	+/-	1.83E-03
Pu-241	1.56E-03	+/-	2.39E-04

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.71E+02	+/-	1.82E+02		2.06E-02	+/-	4.88E-03
SE-75	<	2.84E-01	+/-	2.67E-03	<	7.60E-06	+/-	7.15E-08
EU-152x	<	5.97E-01	+/-	1.11E-02	<	1.60E-05	+/-	2.97E-07
U-233	<	2.10E+04	+/-	4.64E+02	<	5.62E-01	+/-	1.24E-02
U-235		9.51E-01	+/-	9.80E-02		2.54E-05	+/-	2.62E-06
Np-237		4.81E-01	+/-	1.08E-01		1.29E-05	+/-	2.89E-06
Pu-238	<	3.43E+04	+/-	6.70E+02	<	9.16E-01	+/-	1.79E-02
U-238	<	1.53E+01	+/-	2.45E-01	<	4.10E-04	+/-	6.55E-06
Pu-239		1.10E+05	+/-	4.39E+03		2.94E+00	+/-	1.17E-01
Pu-239A		1.18E+05	+/-	3.64E+03		3.16E+00	+/-	9.73E-02
Am-241		5.04E+04	+/-	7.80E+03		1.35E+00	+/-	2.09E-01
Am-241D		3.55E+04	+/-	1.56E+04		9.48E-01	+/-	4.18E-01
Pu-241		1.97E+05	+/-	4.20E+04		5.28E+00	+/-	1.12E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-235	4.40E-01	+/-	4.54E-02
Np-237	6.83E-04	+/-	1.54E-04
Pu-239	1.77E+00	+/-	7.07E-02
Pu-239A	1.91E+00	+/-	5.86E-02
Am-241	1.47E-02	+/-	2.28E-03
Pu-241	1.91E-03	+/-	4.06E-04

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.764	+/-	1.4318
Matrix Longitudinal Ratio:	0.972	+/-	0.8496
Source Vertical Ratio:	0.530	+/-	0.2687
Matrix Vertical Ratio:	0.537	+/-	0.0229

NUDS could not find the transmission peak in one radial segment.

Radioassay Data Sheet — Tue Aug 21 10:03:03 2007

Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: S100-2375	Gross Weight (kg)	: 54.0
Sequence Number	: 2375	Fill Height (%)	: 100.0
Assay Date	: 08/21/07 08:57:25	Density (g/cc)	: 0.11
		Net Weight (kg)	: 22.20
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	4.15e-04	+/-	5.08e-05 Ci/g
Total Pu-239 Equiv Activity:	9.60e+00	+/-	1.13e+00 Ci
Total Pu-239 Fissile Gram Equiv:	1.02e+02	+/-	1.74e+01 g
Decay Heat:	2.94e-01	+/-	3.56e-02 W
Total Pu Mass:	1.08e+02	+/-	1.74e+01 g
TMU:	17.11%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	7.61e-03	7.40e+00
Pu-239	9.42e+01	4.87e-02
Pu-240	5.57e+00	8.16e-01
Pu-241	1.84e-01	6.46e-01
Pu-242	3.06e-02	1.00e+01
Am-241	4.87e-01	4.53e-01
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	8.21e-03	1.53e-03	1.41e-01	2.62e-02	3.01e-03
Pu-239	1.02e+02	1.74e+01	6.30e+00	1.08e+00	3.08e-01
Pu-240	6.00e+00	1.03e+00	1.36e+00	2.33e-01	0.00e+00
Pu-241	1.98e-01	3.39e-02	2.05e+01	3.51e+00	5.93e-03
Pu-242	3.30e-02	6.53e-03	1.29e-04	2.57e-05	0.00e+00
Am-241	4.12e-01	6.91e-02	1.41e+00	2.37e-01	5.70e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	1.16e-02	2.01e-03	8.17e-06	1.42e-06	1.24e-03
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	3.32e-01
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.85e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	3.19e+00
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: S100-2375
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2375
Assayed on: 08/21/07 08:57:25
Report Generated: 08/21/07 10:02:48
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

REVIEW Pu-240 Wt Pct +2 Sigma error <5.66> less than <5.87> Review MGA Resu
Pu-240 Wt Pct error <0.82> is within limits
Pu-238 Wt Pct error <7.40> is within limits
REVIEW QFIT <1.40> > <1.20> Review MGA Results

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.107> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.52e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <1.52> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <1.90> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <4.15> is acceptable in Segment 3
Pulser value <1.01> is within range in Segment 3
DEAD TIME percentage <14.40> is acceptable in Segment 4
Pulser value <1.00> is within range in Segment 4
DEAD TIME percentage <26.63> is acceptable in Segment 5
Pulser value <0.98> is within range in Segment 5
DEAD TIME percentage <27.12> is acceptable in Segment 6
Pulser value <0.98> is within range in Segment 6
DEAD TIME percentage <17.06> is acceptable in Segment 7
Pulser value <1.00> is within range in Segment 7
DEAD TIME percentage <6.25> is acceptable in Segment 8
Pulser value <0.99> is within range in Segment 8
DEAD TIME percentage <2.07> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <1.53> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <1.26> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.06> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <0.88> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.78> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.71> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15
DEAD TIME percentage <0.70> is acceptable in Segment 16
Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
REVIEW Low Transmission Line <279.528015> < <0.001> found in Segment 5
REVIEW Fiducial Transmission Line <400.645996> < <0.01> found in Segment 5
REVIEW Low Transmission Line <279.528015> < <0.001> found in Segment 6
REVIEW Fiducial Transmission Line <400.645996> < <0.01> found in Segment 6
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

REVIEW Reduced chi squared fit value <3.83e+00> exceeds limit <3.00> for energy peak <129.99> in Segment 4
REVIEW Reduced chi squared fit value <1.99e+01> exceeds limit <3.00> for energy peak <129.95> in Segment 5
REVIEW Reduced chi squared fit value <1.02e+01> exceeds limit <3.00> for energy peak <129.94> in Segment 6
REVIEW Reduced chi squared fit value <4.18e+00> exceeds limit <3.00> for energy peak <129.97> in Segment 7
REVIEW Reduced chi squared fit value <4.17e+00> exceeds limit <3.00> for energy peak <662.95> in the .A04

Section 7 - FGE MASS REVIEW

REVIEW FGE Mass <119.54> > <110.00>

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <246.81> is above lower limit <200.00>
Np-237 ratio <8766.02> is above lower limit <125.00>

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <101.57> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed

Independent Reviewer:_____Date:_____

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: S100-2375
Item Description Code:
Sequence Number: 2375
Assayed on: 08/21/07 08:57:25
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA Pu-240 Wt Pct +2 Sigma error is less than lower limit. QFIT is greater than upper limit.	
SECTION 5 - TRANSMISSION Low Transmission Line 279.5 less than 0.001 found in Segment 5 Low Transmission Line 279.5 less than 0.001 found in Segment 6 Low Transmission Line 136.0 less than 0.001 found in Segment 7 Fiducial Transmission Line less than 0.01 found in Segment 5 Fiducial Transmission Line less than 0.01 found in Segment 6	
SECTION 6 - REDUCED CHI SQUARED FIT Chi square failure for 130.0 Kev in Segment 4 Chi square failure for 129.9 Kev in Segment 5 Chi square failure for 129.9 Kev in Segment 6 Chi square failure for 130.0 Kev in Segment 7 Chi square failure for 662.9 KeV in .A04 Spectrum.	
SECTION 7 - FGE MASS FGE Mass is greater than upper limit.	
SECTION 9 - IDC COUNT TYPE	

IDC is not available.	

Technical Reviewer:_____Date:_____

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*************************************************************************
*****                        M G A   R E P O R T                    *****
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Report generated on: 8-21-07 9:53:58 AM

MGA version: MGA V9.5 CI

Spectrum ID: 11202375.CNF Sens : 30.0% LT: 46.5 Mins DT: 16.79
Measurement date: 8-21-07 Declared date: 8-21-07

Sample ID: S100-2375 Detector: Total counts: 1.303E+07

Pu g/cm2 = 0.8437 Cd g/cm2 = 1.7948 FWHM at 122 keV = 628 eV
QFIT = 1.40 FWHM at 208 keV = 802 eV
NQFIT = 1.02

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	Meas. date %Err	Decl. date % weight	Decl. date %Err
Pu-238	0.000081	7.4	7.4	0.0414	7.4	0.00761	7.40	0.00761	7.40
Pu-239	1.000000	0.0	0.4	512.3444	0.7	94.20925	0.05	94.20925	0.05
Pu-240	0.059110	0.9	0.8	30.2845	1.0	5.56867	0.82	5.56867	0.82
Pu-241	0.001952	0.7	0.6	1.0000	0.0	0.18388	0.65	0.18388	0.65
Pu-242	(New alg.	)		0.1663	(10)	0.03058	(10)	0.03058	(10)
Am-241	0.005174	0.5	0.3	2.6510	0.6	0.48747	0.45	0.48747	0.45

Pu-240 effective (meas. date) = 5.639 +/- 0.88%
Am-241 separated about 26.825 +/- 0.149 years ago
Am/Pu-241 weight ratio = 2.65103 +/- 0.66%

Messages :

Lead x-rays detected.
Pu-241/Pu-239 efficiency changed in MGACAL by 1%.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102375.S11
Sample ID: S100-2375 Count Sequence Number: 2375
Assay Start: 8-21-07 8:57:27 AM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 54000.0 g Net: 22200.0 g
Density: 0.107 g /ml

Container Type: 55 Gal Galv
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: Daily 100g Drum Check
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 4:21:04 PM 70097

Reviewed by: _____ Date: _____

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 113.25 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.419 +/- 0.0190
SE-75	264.65	0.000 +/- 0.0000	0.493 +/- 0.0146
SE-75	279.53	0.000 +/- 0.0000	0.521 +/- 0.0224
SE-75	400.65	0.000 +/- 0.0000	0.653 +/- 0.0344

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.00	1.99E+00 +/- 2.47E-01	1.78E+00	4.52E-10 +/- 3.21E-09
2	48.99	3.80E+00 +/- 5.20E-01	1.54E+00	6.44E-07 +/- 1.97E-06
3	60.06	7.54E+00 +/- 5.75E-01	1.48E+00	6.23E-06 +/- 1.15E-05
4	94.71	3.36E+00 +/- 8.73E-01	1.40E+00	1.26E-04 +/- 4.52E-05
5	867.39	1.75E-02 +/- 1.23E-02	1.11E+00	1.02E-04 +/- 5.64E-06
6	1001.03	2.62E-02 +/- 1.51E-02	1.10E+00	9.18E-05 +/- 4.92E-06
7	1112.12	1.75E-02 +/- 1.23E-02	1.10E+00	8.48E-05 +/- 4.39E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.07E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 112.82 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.492 +/- 0.0202
SE-75	264.65	0.000 +/- 0.0000	0.593 +/- 0.0167
SE-75	279.53	0.000 +/- 0.0000	0.569 +/- 0.0255
SE-75	400.65	0.000 +/- 0.0000	0.680 +/- 0.0370

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.18	1.15E+00 +/- 2.12E-01	1.62E+00	1.91E-05 +/- 1.18E-04
2	49.21	1.62E+00 +/- 5.28E-01	1.43E+00	7.97E-05 +/- 2.11E-04
3	60.06	1.60E+01 +/- 7.09E-01	1.38E+00	1.32E-04 +/- 2.14E-04
4	148.57	8.45E-01 +/- 5.87E-01	1.28E+00	4.14E-04 +/- 4.21E-05
5	413.70	1.78E-01 +/- 7.34E-02	1.15E+00	2.89E-04 +/- 1.85E-05
6	443.98	1.08E-01 +/- 7.07E-02	1.15E+00	2.72E-04 +/- 1.86E-05
7	511.67	1.74E-01 +/- 8.38E-02	1.14E+00	2.38E-04 +/- 1.72E-05
8	1333.24	1.40E-01 +/- 3.51E-02	1.08E+00	1.05E-04 +/- 5.54E-06
9	2236.00	1.00E+02 +/- 1.50E+00	1.06E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 110.23 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.401 +/- 0.0239
SE-75	264.65	0.000 +/- 0.0000	0.525 +/- 0.0169
SE-75	279.53	0.000 +/- 0.0000	0.553 +/- 0.0304
SE-75	400.65	0.000 +/- 0.0000	0.602 +/- 0.0430

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.99	2.51E+00 +/- 3.03E-01	1.83E+00	3.41E-06 +/- 3.27E-06
	2	49.93	2.91E+00 +/- 7.94E-01	1.56E+00	3.86E-05 +/- 1.88E-05
	3	60.17	7.13E+01 +/- 1.46E+00	1.51E+00	8.07E-05 +/- 2.79E-05
	4	99.41	2.82E+01 +/- 1.44E+00	1.42E+00	2.97E-04 +/- 3.03E-05
	5	111.70	6.40E+00 +/- 1.08E+00	1.41E+00	3.54E-04 +/- 2.60E-05
	6	116.21	4.67E+00 +/- 1.27E+00	1.40E+00	3.73E-04 +/- 2.47E-05
M	7	126.04	4.92E+00 +/- 4.11E-01	1.40E+00	4.08E-04 +/- 2.26E-05
m	8	129.98	2.52E+01 +/- 9.58E-01	1.39E+00	4.20E-04 +/- 2.22E-05
	9	148.57	1.74E+00 +/- 6.48E-01	1.37E+00	4.63E-04 +/- 2.25E-05
	10	208.68	1.52E+01 +/- 8.35E-01	1.31E+00	4.92E-04 +/- 2.59E-05
	11	300.10	6.26E-01 +/- 4.09E-01	1.24E+00	4.16E-04 +/- 1.88E-05
	12	311.90	5.77E-01 +/- 3.71E-01	1.23E+00	4.04E-04 +/- 1.79E-05

	13	321.11	1.35E+00	+/-	4.26E-01	1.23E+00	3.96E-04	+/-	1.72E-05
M	14	333.39	6.80E+00	+/-	4.75E-01	1.22E+00	3.84E-04	+/-	1.63E-05
m	15	336.44	2.35E+00	+/-	2.40E-01	1.22E+00	3.81E-04	+/-	1.61E-05
	16	345.69	5.39E+00	+/-	4.53E-01	1.22E+00	3.73E-04	+/-	1.56E-05
	17	368.80	2.01E+00	+/-	3.64E-01	1.21E+00	3.52E-04	+/-	1.44E-05
	18	375.70	1.05E+01	+/-	6.17E-01	1.21E+00	3.46E-04	+/-	1.41E-05
M	19	380.76	2.84E+00	+/-	2.74E-01	1.21E+00	3.42E-04	+/-	1.39E-05
m	20	383.50	2.57E+00	+/-	2.48E-01	1.21E+00	3.40E-04	+/-	1.37E-05
	21	393.51	5.60E+00	+/-	3.44E-01	1.21E+00	3.32E-04	+/-	1.34E-05
	22	413.70	1.52E+01	+/-	4.59E-01	1.20E+00	3.16E-04	+/-	1.28E-05
	23	423.18	1.07E+00	+/-	1.48E-01	1.20E+00	3.09E-04	+/-	1.26E-05
	24	445.88	3.47E-01	+/-	1.36E-01	1.20E+00	2.93E-04	+/-	1.21E-05
	25	451.95	1.82E+00	+/-	1.69E-01	1.19E+00	2.89E-04	+/-	1.20E-05
	26	662.42	8.00E-01	+/-	1.09E-01	1.16E+00	1.95E-04	+/-	9.62E-06
	27	722.01	3.62E-01	+/-	7.61E-02	1.15E+00	1.79E-04	+/-	8.87E-06
	28	964.13	4.95E-02	+/-	2.89E-02	1.13E+00	1.39E-04	+/-	5.75E-06
	29	2236.00	1.00E+02	+/-	1.53E+00	1.08E+00	1.32E-04	+/-	3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 98.44 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.362 +/- 0.0323
SE-75	264.65	0.000 +/- 0.0000	0.592 +/- 0.0238
SE-75	279.53	0.000 +/- 0.0000	0.591 +/- 0.0427
SE-75	400.65	0.000 +/- 0.0000	0.674 +/- 0.0497

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
	1	32.04	8.70E+00	+/-	6.62E-01	1.94E+00	1.18E-07	+/-	7.20E-07
	2	50.31	7.36E+00	+/-	1.67E+00	1.63E+00	1.10E-05	+/-	2.72E-05
	3	60.18	4.39E+02	+/-	6.04E+00	1.57E+00	3.62E-05	+/-	5.76E-05
	4	75.38	4.69E+00	+/-	1.64E+00	1.52E+00	1.10E-04	+/-	8.86E-05
	5	99.40	1.73E+02	+/-	3.70E+00	1.47E+00	2.64E-04	+/-	6.33E-05
	6	111.70	3.59E+01	+/-	2.14E+00	1.46E+00	3.35E-04	+/-	3.62E-05
	7	116.26	2.10E+01	+/-	2.86E+00	1.45E+00	3.58E-04	+/-	2.83E-05
M	8	125.96	2.45E+01	+/-	8.58E-01	1.44E+00	3.99E-04	+/-	2.37E-05
m	9	129.99	1.59E+02	+/-	2.90E+00	1.44E+00	4.14E-04	+/-	2.68E-05
	10	148.57	2.12E+01	+/-	1.28E+00	1.40E+00	4.63E-04	+/-	4.66E-05
	11	161.62	3.03E+00	+/-	1.44E+00	1.38E+00	4.81E-04	+/-	5.49E-05
	12	171.98	9.73E+00	+/-	1.40E+00	1.35E+00	4.88E-04	+/-	5.77E-05
	13	180.03	4.16E+00	+/-	1.20E+00	1.34E+00	4.90E-04	+/-	5.79E-05

	14	190.09	5.17E+00	+/-	1.20E+00	1.32E+00	4.89E-04	+/-	5.65E-05
	15	196.29	6.32E+00	+/-	1.33E+00	1.31E+00	4.87E-04	+/-	5.48E-05
	16	208.66	9.95E+01	+/-	2.20E+00	1.29E+00	4.80E-04	+/-	5.05E-05
	17	244.70	1.43E+00	+/-	8.65E-01	1.24E+00	4.48E-04	+/-	3.50E-05
	18	255.96	5.86E+00	+/-	8.31E-01	1.22E+00	4.36E-04	+/-	3.06E-05
M	19	264.48	1.03E+00	+/-	2.87E-01	1.21E+00	4.27E-04	+/-	2.76E-05
m	20	268.21	3.68E+00	+/-	5.15E-01	1.21E+00	4.23E-04	+/-	2.63E-05
	21	298.11	3.44E+00	+/-	9.41E-01	1.20E+00	3.91E-04	+/-	1.92E-05
	22	311.90	5.13E+00	+/-	6.82E-01	1.20E+00	3.77E-04	+/-	1.75E-05
M	23	321.65	3.88E+00	+/-	5.35E-01	1.19E+00	3.68E-04	+/-	1.69E-05
m	24	324.09	6.47E+00	+/-	6.54E-01	1.19E+00	3.66E-04	+/-	1.68E-05
M	25	333.36	4.55E+01	+/-	1.20E+00	1.19E+00	3.57E-04	+/-	1.65E-05
m	26	336.35	1.70E+01	+/-	6.05E-01	1.18E+00	3.54E-04	+/-	1.65E-05
	27	345.65	1.81E+01	+/-	1.51E+00	1.18E+00	3.46E-04	+/-	1.65E-05
	28	362.43	8.26E-01	+/-	5.78E-01	1.17E+00	3.32E-04	+/-	1.68E-05
	29	375.67	7.35E+01	+/-	1.75E+00	1.17E+00	3.21E-04	+/-	1.71E-05
M	30	380.83	1.70E+01	+/-	6.79E-01	1.17E+00	3.17E-04	+/-	1.72E-05
m	31	383.43	1.58E+01	+/-	6.24E-01	1.16E+00	3.15E-04	+/-	1.73E-05
	32	393.53	3.52E+01	+/-	8.87E-01	1.16E+00	3.08E-04	+/-	1.75E-05
	33	413.70	9.56E+01	+/-	1.59E+00	1.16E+00	2.94E-04	+/-	1.78E-05
	34	423.17	6.30E+00	+/-	4.32E-01	1.15E+00	2.87E-04	+/-	1.79E-05
	35	452.03	1.19E+01	+/-	4.25E-01	1.15E+00	2.70E-04	+/-	1.78E-05
	36	605.66	1.32E-01	+/-	7.14E-02	1.13E+00	2.06E-04	+/-	1.32E-05
	37	619.49	1.20E+00	+/-	1.67E-01	1.13E+00	2.02E-04	+/-	1.27E-05
	38	633.77	1.21E-01	+/-	7.81E-02	1.12E+00	1.98E-04	+/-	1.22E-05
	39	646.40	5.31E-01	+/-	1.30E-01	1.12E+00	1.94E-04	+/-	1.18E-05
M	40	659.43	3.62E-01	+/-	8.28E-02	1.12E+00	1.91E-04	+/-	1.14E-05
m	41	662.99	5.38E+00	+/-	3.71E-01	1.12E+00	1.90E-04	+/-	1.13E-05
	42	689.31	2.91E-01	+/-	1.15E-01	1.12E+00	1.84E-04	+/-	1.05E-05

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
	43	709.77	9.41E-02 +/- 6.66E-02	1.12E+00	1.79E-04 +/- 9.90E-06
M	44	718.12	8.59E-02 +/- 4.24E-02	1.12E+00	1.78E-04 +/- 9.69E-06
m	45	722.62	2.50E+00 +/- 2.39E-01	1.12E+00	1.77E-04 +/- 9.58E-06
	46	756.82	3.52E-01 +/- 7.20E-02	1.11E+00	1.70E-04 +/- 8.82E-06
	47	769.99	7.12E-01 +/- 1.05E-01	1.11E+00	1.68E-04 +/- 8.56E-06
	48	2236.00	1.00E+02 +/- 1.60E+00	1.07E+00	7.00E-05 +/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 84.38 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.299 +/- 0.0195
SE-75	279.53	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.07	1.31E+01 +/- 8.44E-01	4.10E+00	2.80E-07 +/- 1.84E-06
	2	50.10	6.47E+00 +/- 1.86E+00	4.10E+00	1.60E-05 +/- 4.34E-05
	3	60.16	1.06E+03 +/- 1.44E+01	4.10E+00	4.79E-05 +/- 8.23E-05
	4	78.78	5.39E+00 +/- 1.90E+00	4.10E+00	1.50E-04 +/- 1.11E-04
	5	99.35	3.69E+02 +/- 6.62E+00	4.10E+00	2.77E-04 +/- 7.11E-05
	6	111.67	7.08E+01 +/- 3.23E+00	4.10E+00	3.41E-04 +/- 3.83E-05
	7	116.26	4.74E+01 +/- 4.30E+00	4.10E+00	3.61E-04 +/- 2.89E-05
M	8	125.92	4.74E+01 +/- 1.33E+00	4.10E+00	3.97E-04 +/- 2.36E-05
m	9	129.95	3.26E+02 +/- 5.34E+00	4.10E+00	4.09E-04 +/- 2.72E-05
	10	148.57	3.66E+01 +/- 2.12E+00	2.89E+00	4.48E-04 +/- 4.84E-05
	11	172.02	1.76E+01 +/- 1.96E+00	2.28E+00	4.67E-04 +/- 5.93E-05
	12	179.86	8.81E+00 +/- 1.57E+00	2.16E+00	4.67E-04 +/- 5.93E-05
	13	189.84	1.09E+01 +/- 1.37E+00	2.04E+00	4.65E-04 +/- 5.77E-05
	14	196.30	1.25E+01 +/- 1.56E+00	1.97E+00	4.63E-04 +/- 5.58E-05
	15	208.63	2.03E+02 +/- 3.75E+00	1.86E+00	4.56E-04 +/- 5.12E-05

16	226.17	2.25E+00	+/-	1.21E+00	1.73E+00	4.42E-04	+/-	4.34E-05
17	256.02	1.19E+01	+/-	1.20E+00	1.57E+00	4.14E-04	+/-	3.05E-05
M 18	264.55	3.41E+00	+/-	5.10E-01	1.53E+00	4.06E-04	+/-	2.74E-05
m 19	268.19	9.71E+00	+/-	8.81E-01	1.53E+00	4.03E-04	+/-	2.62E-05
20	298.02	7.43E+00	+/-	1.33E+00	1.50E+00	3.74E-04	+/-	1.90E-05
21	311.90	9.50E+00	+/-	9.62E-01	1.50E+00	3.62E-04	+/-	1.74E-05
M 22	321.66	9.43E+00	+/-	8.29E-01	1.49E+00	3.53E-04	+/-	1.68E-05
m 23	324.13	1.18E+01	+/-	8.88E-01	1.49E+00	3.51E-04	+/-	1.68E-05
M 24	333.32	8.81E+01	+/-	1.93E+00	1.48E+00	3.43E-04	+/-	1.67E-05
m 25	336.26	3.41E+01	+/-	9.50E-01	1.48E+00	3.41E-04	+/-	1.67E-05
M 26	342.05	8.48E+00	+/-	4.98E-01	1.48E+00	3.36E-04	+/-	1.68E-05
m 27	345.60	7.65E+01	+/-	1.84E+00	1.47E+00	3.34E-04	+/-	1.69E-05
28	368.74	2.86E+01	+/-	1.22E+00	1.46E+00	3.16E-04	+/-	1.76E-05
29	375.61	1.39E+02	+/-	2.91E+00	1.46E+00	3.11E-04	+/-	1.79E-05
M 30	380.79	3.43E+01	+/-	1.07E+00	1.45E+00	3.07E-04	+/-	1.81E-05
m 31	383.34	3.29E+01	+/-	1.01E+00	1.45E+00	3.06E-04	+/-	1.82E-05
32	393.47	7.03E+01	+/-	1.49E+00	1.45E+00	2.99E-04	+/-	1.85E-05
33	413.70	1.88E+02	+/-	2.93E+00	1.44E+00	2.86E-04	+/-	1.90E-05
34	423.13	8.67E+00	+/-	6.39E-01	1.43E+00	2.81E-04	+/-	1.91E-05
35	452.01	2.26E+01	+/-	7.06E-01	1.42E+00	2.65E-04	+/-	1.91E-05
36	482.15	4.50E-01	+/-	2.28E-01	1.40E+00	2.50E-04	+/-	1.87E-05
37	598.09	6.64E-01	+/-	2.01E-01	1.36E+00	2.07E-04	+/-	1.46E-05
38	619.45	1.97E+00	+/-	2.17E-01	1.35E+00	2.01E-04	+/-	1.37E-05
39	646.40	8.56E-01	+/-	2.26E-01	1.34E+00	1.94E-04	+/-	1.27E-05
40	653.16	8.90E-01	+/-	2.59E-01	1.34E+00	1.92E-04	+/-	1.24E-05
M 41	659.52	9.41E-01	+/-	1.34E-01	1.34E+00	1.91E-04	+/-	1.22E-05
m 42	662.90	9.05E+00	+/-	5.15E-01	1.34E+00	1.90E-04	+/-	1.21E-05

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	689.10	6.08E-01 +/- 1.25E-01	1.33E+00	1.84E-04 +/- 1.11E-05
44	703.85	2.88E-01 +/- 1.38E-01	1.33E+00	1.80E-04 +/- 1.06E-05
45	710.32	1.50E-01 +/- 8.06E-02	1.32E+00	1.79E-04 +/- 1.04E-05
46	722.01	4.90E+00 +/- 2.82E-01	1.32E+00	1.77E-04 +/- 1.01E-05
47	737.64	3.74E-01 +/- 9.31E-02	1.32E+00	1.73E-04 +/- 9.63E-06
48	756.54	4.81E-01 +/- 1.16E-01	1.31E+00	1.70E-04 +/- 9.14E-06
49	769.78	1.09E+00 +/- 1.57E-01	1.31E+00	1.67E-04 +/- 8.82E-06
50	964.13	6.41E-02 +/- 4.56E-02	1.27E+00	1.39E-04 +/- 6.40E-06
51	2236.00	1.00E+02 +/- 1.70E+00	1.18E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 83.81 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.264 +/- 0.0182
SE-75	279.53	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.09	2.96E+01 +/- 1.26E+00	4.10E+00	4.78E-07 +/- 3.00E-06
	2	50.09	2.10E+01 +/- 2.49E+00	4.10E+00	2.18E-05 +/- 5.63E-05
	3	60.16	1.01E+03 +/- 1.38E+01	4.10E+00	6.07E-05 +/- 9.93E-05
	4	75.45	4.45E+00 +/- 1.82E+00	4.10E+00	1.52E-04 +/- 1.25E-04
	5	99.34	3.66E+02 +/- 6.63E+00	4.10E+00	3.06E-04 +/- 7.50E-05
	6	111.67	7.56E+01 +/- 3.28E+00	4.10E+00	3.68E-04 +/- 4.00E-05
	7	116.27	4.89E+01 +/- 4.36E+00	4.10E+00	3.88E-04 +/- 3.03E-05
M	8	125.92	5.00E+01 +/- 1.36E+00	4.10E+00	4.21E-04 +/- 2.46E-05
m	9	129.94	3.35E+02 +/- 5.47E+00	4.10E+00	4.33E-04 +/- 2.80E-05
	10	148.57	3.75E+01 +/- 2.15E+00	2.97E+00	4.69E-04 +/- 4.84E-05
	11	172.12	1.76E+01 +/- 1.98E+00	2.35E+00	4.85E-04 +/- 5.88E-05
	12	179.90	5.38E+00 +/- 1.58E+00	2.24E+00	4.85E-04 +/- 5.88E-05

13	189.86	9.34E+00	+/-	1.39E+00	2.11E+00	4.82E-04	+/-	5.72E-05
14	196.27	1.20E+01	+/-	1.37E+00	2.04E+00	4.80E-04	+/-	5.54E-05
15	208.64	2.11E+02	+/-	3.87E+00	1.93E+00	4.72E-04	+/-	5.09E-05
M 16	222.62	2.88E+00	+/-	8.32E-01	1.82E+00	4.62E-04	+/-	4.50E-05
m 17	225.73	3.04E+00	+/-	8.45E-01	1.80E+00	4.60E-04	+/-	4.36E-05
18	255.96	1.44E+01	+/-	1.42E+00	1.63E+00	4.33E-04	+/-	3.10E-05
M 19	264.50	4.23E+00	+/-	5.58E-01	1.59E+00	4.25E-04	+/-	2.79E-05
m 20	268.10	1.05E+01	+/-	9.20E-01	1.59E+00	4.22E-04	+/-	2.67E-05
M 21	298.07	7.37E+00	+/-	8.01E-01	1.56E+00	3.94E-04	+/-	1.97E-05
m 22	300.77	1.86E+00	+/-	4.20E-01	1.56E+00	3.92E-04	+/-	1.93E-05
23	311.90	1.03E+01	+/-	9.85E-01	1.55E+00	3.82E-04	+/-	1.81E-05
M 24	321.74	7.86E+00	+/-	7.95E-01	1.54E+00	3.74E-04	+/-	1.75E-05
m 25	324.05	1.14E+01	+/-	9.00E-01	1.54E+00	3.72E-04	+/-	1.74E-05
M 26	333.29	9.09E+01	+/-	1.99E+00	1.54E+00	3.65E-04	+/-	1.73E-05
m 27	336.28	3.41E+01	+/-	9.56E-01	1.53E+00	3.63E-04	+/-	1.73E-05
28	345.61	6.79E+01	+/-	1.47E+00	1.53E+00	3.55E-04	+/-	1.74E-05
29	362.32	1.22E+00	+/-	6.13E-01	1.52E+00	3.43E-04	+/-	1.79E-05
30	368.81	2.69E+01	+/-	1.27E+00	1.51E+00	3.38E-04	+/-	1.82E-05
31	375.61	1.44E+02	+/-	2.98E+00	1.51E+00	3.34E-04	+/-	1.84E-05
M 32	380.75	3.45E+01	+/-	1.07E+00	1.51E+00	3.30E-04	+/-	1.86E-05
m 33	383.35	3.32E+01	+/-	1.01E+00	1.50E+00	3.28E-04	+/-	1.87E-05
34	393.46	7.40E+01	+/-	1.54E+00	1.50E+00	3.22E-04	+/-	1.90E-05
35	413.70	1.94E+02	+/-	3.01E+00	1.49E+00	3.09E-04	+/-	1.95E-05
36	452.01	2.33E+01	+/-	7.32E-01	1.46E+00	2.88E-04	+/-	1.97E-05
37	481.92	3.85E-01	+/-	2.13E-01	1.45E+00	2.74E-04	+/-	1.93E-05
38	512.04	3.20E-01	+/-	1.81E-01	1.43E+00	2.60E-04	+/-	1.85E-05
39	598.37	5.24E-01	+/-	1.62E-01	1.40E+00	2.29E-04	+/-	1.52E-05
40	619.61	2.01E+00	+/-	2.34E-01	1.39E+00	2.22E-04	+/-	1.43E-05
41	646.39	9.44E-01	+/-	2.34E-01	1.38E+00	2.15E-04	+/-	1.32E-05
42	653.29	6.23E-01	+/-	2.67E-01	1.38E+00	2.13E-04	+/-	1.30E-05

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
M	43	659.29	6.65E-01 +/- 1.15E-01	1.38E+00	2.11E-04 +/- 1.27E-05
m	44	662.93	1.03E+01 +/- 5.60E-01	1.37E+00	2.10E-04 +/- 1.26E-05
	45	689.45	4.86E-01 +/- 1.29E-01	1.37E+00	2.03E-04 +/- 1.16E-05
	46	704.35	3.31E-01 +/- 1.27E-01	1.36E+00	2.00E-04 +/- 1.11E-05
	47	722.01	4.90E+00 +/- 2.77E-01	1.36E+00	1.95E-04 +/- 1.05E-05
	48	756.76	3.99E-01 +/- 1.14E-01	1.35E+00	1.88E-04 +/- 9.53E-06
	49	769.70	1.22E+00 +/- 1.72E-01	1.34E+00	1.85E-04 +/- 9.21E-06
	50	2236.00	1.00E+02 +/- 1.71E+00	1.20E+00	4.34E-05 +/- 2.42E-05
	51	2294.23	1.86E-01 +/- 8.44E-02	1.19E+00	4.08E-05 +/- 2.49E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 95.38 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.352 +/- 0.0191
SE-75	279.53	0.000 +/- 0.0000	0.346 +/- 0.0361
SE-75	400.65	0.000 +/- 0.0000	0.545 +/- 0.0596

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.07	1.89E+01 +/- 9.44E-01	2.20E+00	5.01E-09 +/- 2.87E-08
	2	50.15	5.30E+00 +/- 1.46E+00	1.80E+00	2.94E-06 +/- 6.89E-06
	3	60.17	6.71E+02 +/- 9.04E+00	1.72E+00	1.60E-05 +/- 2.39E-05
	4	99.38	2.18E+02 +/- 4.36E+00	1.60E+00	2.43E-04 +/- 5.52E-05
	5	111.69	4.41E+01 +/- 2.38E+00	1.58E+00	3.35E-04 +/- 3.49E-05
	6	116.30	2.60E+01 +/- 3.16E+00	1.57E+00	3.66E-04 +/- 2.82E-05
M	7	125.96	3.03E+01 +/- 9.72E-01	1.56E+00	4.24E-04 +/- 2.46E-05
m	8	129.97	1.99E+02 +/- 3.48E+00	1.55E+00	4.45E-04 +/- 2.77E-05
	9	148.57	2.46E+01 +/- 1.59E+00	1.53E+00	5.16E-04 +/- 4.85E-05
	10	172.14	7.06E+00 +/- 1.60E+00	1.51E+00	5.55E-04 +/- 6.09E-05
	11	180.03	3.07E+00 +/- 8.68E-01	1.51E+00	5.58E-04 +/- 6.12E-05
	12	189.91	7.29E+00 +/- 1.36E+00	1.50E+00	5.58E-04 +/- 5.97E-05
	13	196.29	7.41E+00 +/- 1.27E+00	1.49E+00	5.56E-04 +/- 5.79E-05

	14	208.65	1.21E+02	+/-	2.49E+00	1.49E+00	5.47E-04	+/-	5.32E-05
	15	256.03	6.29E+00	+/-	6.76E-01	1.45E+00	4.90E-04	+/-	3.18E-05
M	16	264.61	2.14E+00	+/-	3.94E-01	1.45E+00	4.78E-04	+/-	2.86E-05
m	17	268.15	5.39E+00	+/-	6.35E-01	1.45E+00	4.74E-04	+/-	2.74E-05
	18	298.14	3.02E+00	+/-	1.20E+00	1.42E+00	4.34E-04	+/-	2.02E-05
	19	311.90	4.99E+00	+/-	7.31E-01	1.39E+00	4.17E-04	+/-	1.86E-05
M	20	321.60	5.84E+00	+/-	6.12E-01	1.37E+00	4.05E-04	+/-	1.79E-05
m	21	324.16	7.87E+00	+/-	6.80E-01	1.36E+00	4.02E-04	+/-	1.78E-05
M	22	333.35	5.23E+01	+/-	1.32E+00	1.35E+00	3.91E-04	+/-	1.76E-05
m	23	336.34	2.03E+01	+/-	6.75E-01	1.34E+00	3.88E-04	+/-	1.76E-05
	24	345.64	3.84E+01	+/-	9.70E-01	1.33E+00	3.78E-04	+/-	1.76E-05
	25	368.81	1.48E+01	+/-	8.87E-01	1.29E+00	3.55E-04	+/-	1.81E-05
	26	375.65	8.16E+01	+/-	1.93E+00	1.28E+00	3.49E-04	+/-	1.82E-05
M	27	380.82	1.92E+01	+/-	7.39E-01	1.27E+00	3.44E-04	+/-	1.83E-05
m	28	383.41	1.89E+01	+/-	7.05E-01	1.27E+00	3.42E-04	+/-	1.84E-05
	29	393.50	4.25E+01	+/-	1.01E+00	1.26E+00	3.33E-04	+/-	1.86E-05
	30	400.66	7.26E-01	+/-	4.11E-01	1.25E+00	3.27E-04	+/-	1.87E-05
	31	413.70	1.11E+02	+/-	1.82E+00	1.24E+00	3.17E-04	+/-	1.88E-05
	32	423.19	4.06E+00	+/-	5.59E-01	1.24E+00	3.10E-04	+/-	1.88E-05
	33	446.11	7.97E-01	+/-	3.44E-01	1.24E+00	2.94E-04	+/-	1.87E-05
	34	452.03	1.19E+01	+/-	5.24E-01	1.23E+00	2.90E-04	+/-	1.86E-05
	35	482.56	4.51E-01	+/-	2.51E-01	1.23E+00	2.72E-04	+/-	1.80E-05
	36	619.38	1.23E+00	+/-	1.74E-01	1.20E+00	2.16E-04	+/-	1.32E-05
	37	646.51	2.95E-01	+/-	1.54E-01	1.19E+00	2.08E-04	+/-	1.23E-05
	38	653.14	3.71E-01	+/-	1.91E-01	1.19E+00	2.06E-04	+/-	1.20E-05
M	39	659.36	3.02E-01	+/-	8.24E-02	1.19E+00	2.04E-04	+/-	1.18E-05
m	40	662.99	5.53E+00	+/-	3.90E-01	1.19E+00	2.03E-04	+/-	1.17E-05
	41	689.39	3.72E-01	+/-	1.27E-01	1.19E+00	1.96E-04	+/-	1.09E-05
	42	704.01	1.58E-01	+/-	7.83E-02	1.18E+00	1.93E-04	+/-	1.05E-05

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	722.01	2.62E+00 +/- 1.91E-01	1.18E+00	1.89E-04 +/- 9.99E-06
44	738.13	9.86E-02 +/- 5.74E-02	1.18E+00	1.85E-04 +/- 9.59E-06
45	756.88	1.92E-01 +/- 6.76E-02	1.18E+00	1.82E-04 +/- 9.17E-06
46	769.87	7.58E-01 +/- 1.17E-01	1.18E+00	1.79E-04 +/- 8.90E-06
47	2236.00	1.00E+02 +/- 1.63E+00	1.10E+00	5.07E-05 +/- 2.69E-05
48	2294.66	1.86E-01 +/- 5.30E-02	1.10E+00	4.77E-05 +/- 2.77E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 107.81 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.338 +/- 0.0230
SE-75	264.65	0.000 +/- 0.0000	0.600 +/- 0.0196
SE-75	279.53	0.000 +/- 0.0000	0.536 +/- 0.0274
SE-75	400.65	0.000 +/- 0.0000	0.672 +/- 0.0423

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.97	6.34E+00 +/- 4.90E-01	2.02E+00	7.55E-06 +/- 7.37E-06
	2	50.15	2.96E+00 +/- 8.63E-01	1.68E+00	5.99E-05 +/- 2.94E-05
	3	60.18	2.09E+02 +/- 3.06E+00	1.61E+00	1.10E-04 +/- 3.84E-05
	4	99.41	6.34E+01 +/- 2.00E+00	1.51E+00	3.25E-04 +/- 3.30E-05
	5	111.72	1.56E+01 +/- 1.32E+00	1.49E+00	3.75E-04 +/- 2.72E-05
	6	116.16	4.81E+00 +/- 1.64E+00	1.49E+00	3.90E-04 +/- 2.56E-05
M	7	125.96	8.80E+00 +/- 5.13E-01	1.48E+00	4.19E-04 +/- 2.31E-05
m	8	130.01	5.85E+01 +/- 1.46E+00	1.47E+00	4.29E-04 +/- 2.26E-05
	9	148.57	7.49E+00 +/- 9.37E-01	1.43E+00	4.62E-04 +/- 2.28E-05
	10	180.09	2.23E+00 +/- 9.63E-01	1.35E+00	4.81E-04 +/- 2.57E-05
	11	196.43	4.28E+00 +/- 9.21E-01	1.32E+00	4.79E-04 +/- 2.62E-05
	12	208.68	3.07E+01 +/- 1.12E+00	1.30E+00	4.74E-04 +/- 2.60E-05
	13	255.86	9.76E-01 +/- 5.73E-01	1.22E+00	4.39E-04 +/- 2.29E-05
M	14	264.37	5.79E-01 +/- 2.09E-01	1.21E+00	4.32E-04 +/- 2.21E-05
m	15	268.16	1.37E+00 +/- 3.21E-01	1.22E+00	4.28E-04 +/- 2.17E-05
	16	298.10	1.36E+00 +/- 5.62E-01	1.24E+00	4.01E-04 +/- 1.90E-05
M	17	321.77	1.31E+00 +/- 3.18E-01	1.22E+00	3.79E-04 +/- 1.71E-05
m	18	324.03	1.48E+00 +/- 3.32E-01	1.22E+00	3.77E-04 +/- 1.69E-05
M	19	333.33	1.32E+01 +/- 6.31E-01	1.21E+00	3.69E-04 +/- 1.62E-05

m 20	336.34	4.19E+00	+/-	3.14E-01	1.20E+00	3.67E-04	+/-	1.60E-05
M 21	342.15	1.13E+00	+/-	1.99E-01	1.20E+00	3.62E-04	+/-	1.56E-05
m 22	345.65	1.19E+01	+/-	6.11E-01	1.20E+00	3.59E-04	+/-	1.54E-05
23	375.67	2.17E+01	+/-	8.25E-01	1.18E+00	3.34E-04	+/-	1.38E-05
M 24	380.87	4.84E+00	+/-	3.52E-01	1.17E+00	3.30E-04	+/-	1.36E-05
m 25	383.41	4.82E+00	+/-	3.40E-01	1.17E+00	3.28E-04	+/-	1.35E-05
26	393.52	1.04E+01	+/-	4.20E-01	1.16E+00	3.21E-04	+/-	1.31E-05
27	413.70	2.91E+01	+/-	6.59E-01	1.16E+00	3.06E-04	+/-	1.25E-05
28	423.21	1.82E+00	+/-	1.99E-01	1.15E+00	3.00E-04	+/-	1.22E-05
29	452.04	3.47E+00	+/-	2.18E-01	1.15E+00	2.82E-04	+/-	1.16E-05
30	619.56	3.41E-01	+/-	1.13E-01	1.13E+00	2.06E-04	+/-	9.86E-06
31	653.21	2.00E-01	+/-	9.91E-02	1.12E+00	1.96E-04	+/-	9.51E-06
32	662.42	1.45E+00	+/-	1.38E-01	1.12E+00	1.93E-04	+/-	9.41E-06
33	689.36	1.19E-01	+/-	5.81E-02	1.12E+00	1.86E-04	+/-	9.10E-06
34	722.01	7.07E-01	+/-	1.03E-01	1.12E+00	1.78E-04	+/-	8.71E-06
35	964.13	3.04E-02	+/-	2.67E-02	1.10E+00	1.39E-04	+/-	5.73E-06
36	1001.03	4.84E-02	+/-	3.71E-02	1.10E+00	1.35E-04	+/-	5.36E-06
37	1085.91	5.53E-02	+/-	2.26E-02	1.09E+00	1.28E-04	+/-	4.75E-06
38	1333.76	9.41E-02	+/-	3.17E-02	1.08E+00	1.15E-04	+/-	5.91E-06
39	2236.00	1.00E+02	+/-	1.54E+00	1.07E+00	1.19E-04	+/-	2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 112.62 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.389 +/- 0.0195
SE-75	264.65	0.000 +/- 0.0000	0.568 +/- 0.0170
SE-75	279.53	0.000 +/- 0.0000	0.579 +/- 0.0269
SE-75	400.65	0.000 +/- 0.0000	0.653 +/- 0.0383

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
1	32.16	2.05E+00	+/-	2.91E-01	1.86E+00	6.61E-09	+/-	3.95E-08
2	60.16	3.11E+01	+/-	8.90E-01	1.52E+00	1.65E-05	+/-	2.58E-05
3	67.89	1.46E+00	+/-	4.45E-01	1.50E+00	3.95E-05	+/-	4.38E-05
4	99.39	2.36E+00	+/-	8.58E-01	1.44E+00	2.36E-04	+/-	5.57E-05
5	115.81	1.31E+00	+/-	6.16E-01	1.42E+00	3.48E-04	+/-	2.84E-05
6	148.57	8.81E-01	+/-	5.95E-01	1.38E+00	4.88E-04	+/-	4.79E-05
7	189.99	5.70E-01	+/-	2.69E-01	1.32E+00	5.23E-04	+/-	5.82E-05
8	208.49	1.31E+00	+/-	3.76E-01	1.29E+00	5.11E-04	+/-	5.16E-05
9	375.71	5.74E-01	+/-	1.95E-01	1.18E+00	3.18E-04	+/-	1.78E-05
10	413.70	6.86E-01	+/-	1.05E-01	1.17E+00	2.88E-04	+/-	1.83E-05

11	511.63	2.42E-01	+/-	6.60E-02	1.15E+00	2.33E-04	+/- 1.66E-05
12	1085.91	2.42E-02	+/-	2.15E-02	1.10E+00	1.27E-04	+/- 5.58E-06
13	1173.55	8.69E-02	+/-	3.13E-02	1.10E+00	1.21E-04	+/- 5.16E-06
14	2236.00	1.00E+02	+/-	1.51E+00	1.07E+00	6.12E-05	+/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 113.24 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.369 +/- 0.0181
SE-75	264.65	0.000 +/- 0.0000	0.534 +/- 0.0161
SE-75	279.53	0.000 +/- 0.0000	0.534 +/- 0.0231
SE-75	400.65	0.000 +/- 0.0000	0.585 +/- 0.0339

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.20	1.48E+00 +/- 2.39E-01	1.91E+00	1.70E-05 +/- 1.68E-05
2	60.11	1.37E+01 +/- 6.10E-01	1.56E+00	1.37E-04 +/- 4.88E-05
3	67.83	9.43E-01 +/- 4.42E-01	1.53E+00	1.79E-04 +/- 4.97E-05
4	121.11	9.35E-01 +/- 6.31E-01	1.44E+00	3.97E-04 +/- 2.38E-05
5	867.39	1.89E-02 +/- 1.73E-02	1.14E+00	1.60E-04 +/- 7.45E-06
6	964.13	4.76E-02 +/- 2.72E-02	1.13E+00	1.45E-04 +/- 6.11E-06
7	1001.03	1.74E-02 +/- 1.23E-02	1.13E+00	1.41E-04 +/- 5.67E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 113.55 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.230 +/- 0.0148
SE-75	264.65	0.000 +/- 0.0000	0.394 +/- 0.0126
SE-75	279.53	0.000 +/- 0.0000	0.391 +/- 0.0205
SE-75	400.65	0.000 +/- 0.0000	0.452 +/- 0.0283

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.71	9.88E-01 +/- 1.94E-01	2.48E+00	1.37E-03 +/- 9.00E-03
2	49.65	2.08E+00 +/- 4.18E-01	1.97E+00	6.05E-04 +/- 1.64E-03
3	60.20	5.25E+00 +/- 4.77E-01	1.87E+00	5.03E-04 +/- 8.45E-04
4	67.77	7.96E-01 +/- 3.38E-01	1.82E+00	4.65E-04 +/- 5.58E-04
5	95.57	2.41E+00 +/- 6.40E-01	1.73E+00	4.12E-04 +/- 1.29E-04
6	135.30	9.44E-01 +/- 3.99E-01	1.66E+00	3.99E-04 +/- 3.14E-05
7	264.66	4.39E-01 +/- 2.61E-01	1.40E+00	3.71E-04 +/- 2.52E-05
8	511.12	2.40E-01 +/- 6.43E-02	1.29E+00	2.67E-04 +/- 1.91E-05
9	964.13	5.24E-02 +/- 2.14E-02	1.20E+00	1.45E-04 +/- 6.48E-06
10	1001.03	5.51E-02 +/- 4.27E-02	1.20E+00	1.39E-04 +/- 6.19E-06
11	1085.91	1.75E-02 +/- 1.23E-02	1.19E+00	1.27E-04 +/- 5.57E-06
12	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.78 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.073 +/- 0.0096
SE-75	264.65	0.000 +/- 0.0000	0.152 +/- 0.0080
SE-75	279.53	0.000 +/- 0.0000	0.143 +/- 0.0135
SE-75	400.65	0.000 +/- 0.0000	0.198 +/- 0.0199

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.91	6.90E-01 +/- 1.81E-01	4.00E+00	2.19E-09 +/- 1.36E-08
2	49.66	1.53E+00 +/- 3.81E-01	2.97E+00	1.91E-06 +/- 4.92E-06
3	60.18	3.42E+00 +/- 3.89E-01	2.75E+00	1.30E-05 +/- 2.08E-05
4	185.71	5.03E-01 +/- 3.23E-01	2.11E+00	5.47E-04 +/- 6.36E-05
5	264.66	4.43E-01 +/- 2.87E-01	1.88E+00	4.54E-04 +/- 2.86E-05
6	413.70	6.20E-02 +/- 4.98E-02	1.73E+00	2.87E-04 +/- 1.84E-05
7	2236.00	1.00E+02 +/- 1.50E+00	1.29E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.99 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.351 +/- 0.0156
SE-75	264.65	0.000 +/- 0.0000	0.438 +/- 0.0131
SE-75	279.53	0.000 +/- 0.0000	0.464 +/- 0.0194
SE-75	400.65	0.000 +/- 0.0000	0.508 +/- 0.0295

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.43	3.26E-01 +/- 1.19E-01	1.96E+00	2.11E-08 +/- 1.35E-07
2	60.15	9.13E-01 +/- 2.23E-01	1.59E+00	2.28E-05 +/- 3.87E-05
3	1085.91	1.74E-02 +/- 1.23E-02	1.16E+00	1.32E-04 +/- 5.78E-06
4	2236.00	1.00E+02 +/- 1.50E+00	1.11E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 114.10 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.882 +/- 0.0249
SE-75	264.65	0.000 +/- 0.0000	0.954 +/- 0.0227
SE-75	279.53	0.000 +/- 0.0000	0.954 +/- 0.0291
SE-75	400.65	0.000 +/- 0.0000	1.000 +/- 0.0000

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.71	3.48E-01 +/- 1.27E-01	1.10E+00	3.23E-06 +/- 1.98E-05
2	50.56	1.96E+00 +/- 2.92E-01	1.07E+00	4.85E-05 +/- 1.17E-04
3	60.29	5.71E-01 +/- 2.20E-01	1.06E+00	9.66E-05 +/- 1.50E-04
4	311.90	1.40E-01 +/- 8.71E-02	1.01E+00	3.71E-04 +/- 1.72E-05
5	400.66	1.16E-01 +/- 5.92E-02	1.00E+00	3.06E-04 +/- 1.78E-05
6	964.13	6.92E-02 +/- 2.45E-02	1.00E+00	1.41E-04 +/- 6.33E-06
7	1408.01	1.73E-02 +/- 1.22E-02	1.00E+00	1.05E-04 +/- 7.02E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.00E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.18 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.892 +/- 0.0243
SE-75	264.65	0.000 +/- 0.0000	1.000 +/- 0.0000
SE-75	279.53	0.000 +/- 0.0000	0.945 +/- 0.0292
SE-75	400.65	0.000 +/- 0.0000	0.923 +/- 0.0420

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.57	2.53E-01 +/- 8.99E-02	1.09E+00	1.67E-09 +/- 1.03E-08
2	50.23	1.54E+00 +/- 2.69E-01	1.06E+00	1.87E-06 +/- 4.83E-06
3	152.68	3.15E-01 +/- 2.06E-01	1.04E+00	4.90E-04 +/- 5.37E-05
4	490.23	5.03E-02 +/- 3.08E-02	1.03E+00	2.23E-04 +/- 1.59E-05

5	964.13	3.46E-02	+/-	1.73E-02	1.02E+00	1.33E-04	+/- 6.09E-06
6	1173.97	7.90E-02	+/-	2.86E-02	1.02E+00	1.12E-04	+/- 4.95E-06
7	1333.09	1.17E-01	+/-	4.41E-02	1.02E+00	9.75E-05	+/- 5.41E-06
8	2236.00	1.00E+02	+/-	1.50E+00	1.01E+00	3.18E-05	+/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.20 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.847 +/- 0.0243
SE-75	264.65	0.000 +/- 0.0000	0.933 +/- 0.0222
SE-75	279.53	0.000 +/- 0.0000	0.925 +/- 0.0291
SE-75	400.65	0.000 +/- 0.0000	0.988 +/- 0.0437

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	148.57	4.39E-01 +/- 2.73E-01	1.06E+00	2.48E-04 +/- 1.51E-05
2	400.66	1.36E-01 +/- 4.43E-02	1.00E+00	1.84E-04 +/- 9.10E-06
3	413.70	7.84E-02 +/- 4.13E-02	1.00E+00	1.79E-04 +/- 8.85E-06
4	867.39	3.11E-02 +/- 2.43E-02	1.00E+00	8.96E-05 +/- 5.22E-06
5	1085.91	2.43E-02 +/- 2.09E-02	1.00E+00	7.51E-05 +/- 3.53E-06
6	1173.85	1.02E-01 +/- 3.70E-02	1.00E+00	7.13E-05 +/- 3.33E-06
7	1408.01	2.32E-02 +/- 2.14E-02	1.00E+00	6.48E-05 +/- 4.76E-06
8	2236.00	1.00E+02 +/- 1.49E+00	1.00E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: S100-2375
Peak Locate Performed on: 8-21-07 9:53:59 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.78	0.1076	32.05	38.97
2	100.72	0.1626	50.02	14.17
3	121.00	0.0323	60.17	415.69
4	151.84	0.2905	75.59	5.72
5	199.40	0.0421	99.37	223.80
6	224.04	0.0613	111.68	113.86
7	233.18	0.0695	116.25	45.79
8	260.59	0.0424	129.96	225.10
9	299.16	0.0871	149.24	60.72
10	344.89	0.1613	172.11	18.17
11	360.60	0.1673	179.97	14.70
12	380.45	0.1549	189.89	16.45
13	393.26	0.1309	196.30	25.36
14	417.97	0.0437	208.65	218.28
15	488.21	0.2320	243.77	6.49
16	512.68	0.1176	256.00	29.08
17	529.85	0.2174	264.60	9.64
18	537.01	0.1335	268.17	24.79
19	596.82	0.1468	298.08	19.90
20	625.55	0.1071	312.44	32.87
21	643.26	0.1947	321.64	12.34
22	649.04	0.1632	324.09	15.14
23	667.18	0.0606	333.33	110.37
24	673.76	0.1001	336.31	46.36
25	691.93	0.0600	345.63	112.92
26	725.60	0.2481	362.47	5.69
27	738.30	0.0916	368.82	36.23
28	751.95	0.0456	375.64	191.44
29	761.96	0.0820	380.80	66.61
30	767.77	0.0915	383.38	54.70
31	787.64	0.0602	393.49	97.94
32	829.27	0.0451	414.30	180.42
33	846.99	0.0915	423.16	48.41
34	904.71	0.0764	452.02	62.20
35	964.96	0.2390	482.15	7.19
36	1023.80	0.2237	511.56	6.11

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	1197.21	0.2747	598.27	5.15
38	1239.65	0.1536	619.49	14.58
39	1293.51	0.1547	646.42	14.26
40	1307.07	0.1660	653.20	12.43
41	1318.74	0.2679	659.43	8.28
42	1326.52	0.0928	662.95	38.38
43	1379.30	0.2001	689.32	8.99
44	1408.77	0.2387	704.05	6.47
45	1445.73	0.1127	722.53	26.52
46	1514.16	0.2094	756.75	8.49
47	1540.25	0.1997	769.79	8.31
48	2348.40	0.2236	1173.87	6.60
49	2667.03	0.2005	1333.18	7.58
50	4471.85	0.0268	2235.59	397.50

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: S100-2375
Peak Analysis Performed on: 8-21-07 9:53:59 AM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	60-	68	64.78	32.05	6.44E+03	167.65	9.08E+03
	2	94-	104	100.72	50.02	6.25E+03	365.23	5.17E+04
	3	114-	127	121.00	60.17	3.23E+05	714.65	6.84E+04
	4	145-	158	151.84	75.59	2.61E+03	420.73	6.25E+04
	5	194-	203	199.40	99.37	1.11E+05	776.94	2.19E+05
	6	217-	227	224.04	111.68	2.18E+04	546.55	1.13E+05
	7	227-	240	233.18	116.25	1.28E+04	730.63	1.77E+05
	8	256-	267	260.59	129.96	8.33E+04	506.57	6.74E+04
	9	293-	306	299.16	149.24	1.08E+04	424.68	6.11E+04
	10	338-	351	344.89	172.11	4.55E+03	375.02	4.93E+04
	11	355-	367	360.60	179.97	1.91E+03	342.08	4.37E+04
	12	373-	387	380.45	189.89	3.57E+03	376.73	4.80E+04
	13	389-	400	393.26	196.30	3.67E+03	308.75	3.65E+04
	14	413-	425	417.97	208.65	6.19E+04	454.09	5.26E+04
	15	482-	495	488.21	243.77	1.02E+03	256.53	2.35E+04
	16	505-	516	512.68	256.00	3.54E+03	220.87	1.81E+04
M	17	527-	544	529.87	264.60	1.05E+03	95.78	9.64E+03
m	18	527-	544	537.00	268.17	2.79E+03	156.32	1.05E+04
	19	592-	604	596.82	298.08	2.14E+03	201.00	1.45E+04
	20	621-	631	625.55	312.44	2.73E+03	177.30	1.20E+04
M	21	638-	656	643.95	321.64	2.63E+03	139.84	1.22E+04
m	22	638-	656	648.85	324.09	3.60E+03	155.79	1.35E+04
M	23	659-	678	667.33	333.33	2.72E+04	262.01	8.62E+03
m	24	659-	678	673.28	336.31	1.03E+04	140.87	8.39E+03
	25	691-	699	691.93	345.63	2.03E+04	194.79	7.10E+03
	26	722-	730	725.60	362.47	1.85E+02	111.29	5.69E+03
	27	730-	745	738.30	368.82	7.96E+03	208.54	1.18E+04
	28	745-	759	751.95	375.64	4.27E+04	371.02	3.06E+04
M	29	759-	775	762.26	380.80	1.03E+04	157.92	6.12E+03
m	30	759-	775	767.42	383.38	9.83E+03	147.82	4.66E+03
	31	779-	795	787.64	393.49	2.17E+04	195.38	5.26E+03
	32	821-	837	829.27	414.30	5.71E+04	263.90	4.01E+03
	33	843-	852	846.99	423.16	2.77E+03	101.48	3.15E+03
	34	898-	912	904.71	452.02	6.84E+03	108.22	1.70E+03
	35	961-	972	964.96	482.15	1.09E+02	47.09	8.35E+02
	36	1015-	1031	1023.80	511.56	4.48E+02	57.68	9.21E+02
	37	1192-	1205	1197.21	598.27	1.39E+02	34.08	3.70E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	38	1231-	1247	1239.65	619.49	6.15E+02	45.53	4.66E+02
	39	1289-	1301	1293.51	646.42	1.79E+02	40.13	5.37E+02
	40	1301-	1315	1307.07	653.20	2.37E+02	45.26	5.86E+02
M	41	1315-	1334	1319.53	659.43	2.30E+02	21.18	2.80E+02
m	42	1315-	1334	1326.57	662.95	2.98E+03	84.02	2.37E+02
	43	1371-	1385	1379.30	689.32	2.33E+02	29.84	2.25E+02
	44	1404-	1415	1408.77	704.05	9.62E+01	23.71	1.84E+02
	45	1441-	1454	1445.73	722.53	1.45E+03	45.69	2.31E+02
	46	1510-	1522	1514.16	756.75	1.88E+02	21.62	1.06E+02
	47	1531-	1548	1540.25	769.79	3.66E+02	30.36	1.71E+02
	48	2342-	2357	2348.40	1173.87	8.37E+01	16.58	6.23E+01
	49	2662-	2676	2667.03	1333.18	1.34E+02	14.91	3.11E+01
	50	4466-	4482	4471.85	2235.59	1.73E+05	417.84	3.45E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: S100-2375
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.988	2236.00*	100.00	7.329E+02	1.999E+02
Np-237	0.745	300.10	6.63		
		311.90*	38.60	6.406E+00	4.205E-01
Pu-239	0.975	413.70*	0.00	4.290E+06	8.525E+04
Pu-239A	0.969	129.29*	0.01	1.217E+06	3.427E+04
Am-241	0.980	662.42*	0.00	1.234E+06	3.739E+04
Am-241D	0.981	722.01*	0.00	1.316E+06	4.400E+04
Pu-241	0.968	148.57*	0.00	4.760E+06	2.178E+05

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-21-07 9:53:59 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	32.05	5.9700E+01	2.62
2	50.02	5.7917E+01	5.85
3	60.17	2.9915E+03	0.34
4	75.59	2.4219E+01	16.10
5	99.37	1.0262E+03	0.75
6	111.68	2.0189E+02	2.52
7	116.25	1.1836E+02	5.73
10	172.11	4.2157E+01	8.25
11	179.97	1.7701E+01	17.91
12	189.89	3.3050E+01	10.57
13	196.30	3.3983E+01	8.42
14	208.65	5.7332E+02	0.78
15	243.77	9.4273E+00	25.22
16	256.00	3.2847E+01	6.24
M 17	264.60	9.7651E+00	9.09
m 18	268.17	2.5854E+01	5.61
19	298.08	1.9868E+01	9.38
M 21	321.64	2.4351E+01	5.33
m 22	324.09	3.3358E+01	4.34
M 23	333.33	2.5173E+02	1.00
m 24	336.31	9.5607E+01	1.39
25	345.63	1.8805E+02	0.99
26	362.47	1.7155E+00	60.12
27	368.82	7.3722E+01	2.63
28	375.64	3.9531E+02	0.91
M 29	380.80	9.5089E+01	1.56
m 30	383.38	9.1050E+01	1.53
31	393.49	2.0127E+02	0.94
33	423.16	2.5691E+01	3.67
34	452.02	6.3345E+01	1.60
35	482.15	1.0106E+00	43.18
36	511.56	4.1486E+00	12.89
37	598.27	1.2892E+00	24.50
38	619.49	5.7004E+00	7.41
39	646.42	1.6544E+00	22.48
40	653.20	2.1961E+00	19.10
M 41	659.43	2.1276E+00	9.23
43	689.32	2.1577E+00	12.82
44	704.05	8.9128E-01	24.65
46	756.75	1.7456E+00	11.48
47	769.79	3.3929E+00	8.30
48	1173.87	7.7527E-01	19.82
49	1333.18	1.2411E+00	11.14

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.98E+02	+/-	1.18E+02		3.60E-02	+/-	5.30E-03
SE-75		1.02E-01	+/-	3.93E-02		4.62E-06	+/-	1.77E-06
EU-152x	<	3.05E-01	+/-	2.10E-02	<	1.37E-05	+/-	9.46E-07
U-233	<	3.07E+04	+/-	2.48E+03	<	1.38E+00	+/-	1.12E-01
U-235		9.17E-02	+/-	5.98E-02		4.13E-06	+/-	2.69E-06
Np-237		8.17E+00	+/-	4.90E-01		3.68E-04	+/-	2.21E-05
Pu-238		1.93E+03	+/-	1.28E+03		8.67E-02	+/-	5.75E-02
U-238		4.27E+00	+/-	1.68E+00		1.92E-04	+/-	7.55E-05
Pu-239		5.21E+06	+/-	1.79E+05		2.35E+02	+/-	8.07E+00
Pu-239A		3.42E+06	+/-	1.38E+05		1.54E+02	+/-	6.23E+00
Am-241		1.41E+06	+/-	5.95E+04		6.34E+01	+/-	2.68E+00
Am-241D		1.51E+06	+/-	6.45E+04		6.81E+01	+/-	2.90E+00
Pu-241		9.34E+06	+/-	6.08E+05		4.21E+02	+/-	2.74E+01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
SE-75	7.05E-12	+/-	2.70E-12
U-235	4.24E-02	+/-	2.77E-02
Np-237	1.16E-02	+/-	6.96E-04
Pu-238	1.12E-04	+/-	7.45E-05
U-238	1.27E+01	+/-	4.99E+00
Pu-239	8.38E+01	+/-	2.89E+00
Pu-239A	5.51E+01	+/-	2.23E+00
Am-241	4.11E-01	+/-	1.74E-02
Pu-241	9.03E-02	+/-	5.88E-03

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.33E+02	+/-	2.00E+02		3.30E-02	+/-	9.00E-03
SE-75	<	1.22E+00	+/-	1.35E-02	<	5.48E-05	+/-	6.10E-07
EU-152x	<	6.54E-01	+/-	1.37E-02	<	2.95E-05	+/-	6.17E-07
U-233	<	7.03E+04	+/-	1.78E+03	<	3.17E+00	+/-	8.00E-02
U-235	<	1.67E+00	+/-	4.34E-02	<	7.53E-05	+/-	1.95E-06
Np-237		6.41E+00	+/-	4.21E-01		2.89E-04	+/-	1.89E-05
Pu-238	<	1.23E+05	+/-	2.89E+03	<	5.54E+00	+/-	1.30E-01
U-238	<	1.68E+01	+/-	2.77E-01	<	7.59E-04	+/-	1.25E-05
Pu-239		4.29E+06	+/-	8.53E+04		1.93E+02	+/-	3.84E+00
Pu-239A		1.22E+06	+/-	3.43E+04		5.48E+01	+/-	1.54E+00
Am-241		1.23E+06	+/-	3.74E+04		5.56E+01	+/-	1.68E+00
Am-241D		1.32E+06	+/-	4.40E+04		5.93E+01	+/-	1.98E+00
Pu-241		4.76E+06	+/-	2.18E+05		2.14E+02	+/-	9.81E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	9.10E-03	+/-	5.97E-04
Pu-239	6.91E+01	+/-	1.37E+00
Pu-239A	1.96E+01	+/-	5.52E-01
Am-241	3.60E-01	+/-	1.09E-02
Pu-241	4.60E-02	+/-	2.11E-03

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.866	+/-	3.4288
Matrix Longitudinal Ratio:	0.758	+/-	0.1373
Source Vertical Ratio:	0.897	+/-	0.4500
Matrix Vertical Ratio:	0.859	+/-	0.2446

NUDS could not find the transmission peak in one radial segment.
NUDS could not find the source peak in one radial segment.

Radioassay Data Sheet
Procedure ID & Rev: WCP-55 03/07/2002

Tue Aug 28 06:58:02 2007
Software Version: GWAS v2.3bGEN

Drum ID	: LL85101368	Gross Weight (kg)	: 67.0
Sequence Number	: 2376	Fill Height (%)	: 100.0
Assay Date	: 08/21/07 10:20:01	Density (g/cc)	: 0.18
		Net Weight (kg)	: 36.90
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	1.43e-04	+/- 2.00e-05	Ci/g
Total Pu-239 Equiv Activity:	5.36e+00	+/- 7.37e-01	Ci
Total Pu-239 Fissile Gram Equiv:	6.12e+01	+/- 1.15e+01	g
Decay Heat:	1.67e-01	+/- 2.32e-02	W
Total Pu Mass:	6.50e+01	+/- 1.15e+01	g
TMU:	18.81%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	1.41e-02	9.00e+00
Pu-239	9.38e+01	1.08e-01
Pu-240	6.12e+00	1.64e+00
Pu-241	7.66e-02	4.79e+00
Pu-242	2.72e-02	1.00e+01
Am-241	3.45e-01	1.11e+00
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	9.20e-03	1.92e-03	1.57e-01	3.28e-02	1.70e-03
Pu-239	6.10e+01	1.15e+01	3.78e+00	7.11e-01	2.02e-01
Pu-240	3.98e+00	7.51e-01	9.03e-01	1.70e-01	0.00e+00
Pu-241	4.98e-02	9.66e-03	5.15e+00	9.99e-01	1.99e-03
Pu-242	1.77e-02	3.77e-03	6.94e-05	1.48e-05	0.00e+00
Am-241	1.26e-01	2.41e-02	4.31e-01	8.26e-02	5.18e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	5.04e-03	1.07e-03	3.55e-06	7.52e-07	1.15e-03
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	2.03e-01
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	2.42e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	1.74e+00
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Robert J Hazlett — 8-28-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85101368
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2376
Assayed on: 08/21/07 10:20:01
Report Generated: 08/28/07 18:57:47
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

OK

REVIEW Pu-240 Wt Pct -2 Sigma error <5.92> greater than <5.87> Review MGA R
Pu-240 Wt Pct error <1.64> is within limits
Pu-238 Wt Pct error <9.00> is within limits
QFIT <1.19> is within limits
REVIEW MGAERR12: Calculations in MGAABS didn't converge: MGA results may be suspect

OK

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.177> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

REVIEW Pu-239/Pu-239a ratio <3.80e+00> > <2.50e+00>

OK

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.77> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <0.86> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <0.93> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <1.12> is acceptable in Segment 4
Pulser value <0.99> is within range in Segment 4
DEAD TIME percentage <1.39> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <2.23> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <7.17> is acceptable in Segment 7
Pulser value <1.00> is within range in Segment 7
DEAD TIME percentage <10.17> is acceptable in Segment 8
Pulser value <1.00> is within range in Segment 8
DEAD TIME percentage <5.57> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <2.35> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <1.72> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.44> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <1.23> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.99> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.85> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15

DEAD TIME percentage <0.74> is acceptable in Segment 16
Pulser value <0.98> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
Transmission results are acceptable in Segment 5
Transmission results are acceptable in Segment 6
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

REVIEW Reduced chi squared fit value <3.00e+00> exceeds limit <3.00> for energy peak <129.99> in the .A04 OK

Section 7 - FGE MASS REVIEW

FGE Mass <72.63> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <483.45> is above lower limit <200.00> OK
Np-237 ratio <12090.71> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <60.96> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed OK. Checked.

Independent Reviewer: Robert J Harlitt Jr Date: 8-28-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85101368
Item Description Code:
Sequence Number: 2376
Assayed on: 08/21/07 10:20:01
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA	
Pu-240 Wt Pct -2 Sigma error is greater than upper limit.	OK
MGAERR12	OK
SECTION 3 - SELF-ABSORPTION	
Pu-239/Pu-239a ratio is greater than upper limit.	OK
SECTION 6 - REDUCED CHI SQUARED FIT	
Chi square failure for 130.0 KeV in .A04 Spectrum.	OK
SECTION 9 - IDC COUNT TYPE	
IDC is not available.	N/A

Technical Reviewer: Robert J Hazlitt Jr Date: 8-28-07

```
*********************************************************************
*****                    M G A   R E P O R T                    *****
*********************************************************************
```

Report generated on: 8-28-07 6:22:22 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202376.CNF Sens : 30.0% LT: 52.5 Mins DT: 5.89
Measurement date: 8-21-07 Declared date: 8-21-07

Sample ID: LL85101368 Detector: Total counts: 5.256E+06

Pu g/cm2 = 0.6500 Cd g/cm2 = 2.0000 FWHM at 122 keV = 622 eV
QFIT = 1.19 FWHM at 208 keV = 795 eV
NQFIT = 1.02

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000151	9.0	8.9	0.1847	9.6	0.01414	9.00	0.01414	9.00
Pu-239	1.000000	0.0	0.9	1224.651	4.8	93.76344	0.11	93.76344	0.11
Pu-240	0.065256	1.7	1.6	79.9162	4.7	6.11866	1.64	6.11866	1.64
Pu-241	0.000817	4.8	4.5	1.0000	0.0	0.07656	4.79	0.07656	4.79
Pu-242	(New alg.	)		0.3552	(10)	0.02719	(10)	0.02719	(10)
Am-241	0.003677	1.2	0.8	4.5026	4.5	0.34473	1.11	0.34473	1.11

Pu-240 effective (meas. date) = 6.200 +/- 1.83%
U-237 separated more than 10 days ago
Am-241 separated about 35.409 +/- 0.466 years ago
Am/Pu-241 weight ratio = 4.50256 +/- 4.57%

Messages :

Lead x-rays detected.
Calculations in MGAABS didn't converge : results may be suspect.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102376.S11
Sample ID: LL85101368 Count Sequence Number: 2376
Assay Start: 8-21-07 10:20:03 AM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 67000.0 g Net: 36900.0 g
Density: 0.177 g /ml

Container Type: 55 Gal Galv 66.3
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv 66.3
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 3:44:55 PM 72717

Reviewed by: Robert J Haslett Jr Date: 8-28-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.12 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.099 +/- 0.0091
SE-75	264.65	0.000 +/- 0.0000	0.183 +/- 0.0077
SE-75	279.53	0.000 +/- 0.0000	0.182 +/- 0.0131
SE-75	400.65	0.000 +/- 0.0000	0.225 +/- 0.0207

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.84	2.84E-01 +/- 1.03E-01	3.58E+00	4.06E-10 +/- 2.92E-09
2	48.93	1.31E+00 +/- 2.91E-01	2.70E+00	6.35E-07 +/- 1.95E-06
3	60.19	4.18E+00 +/- 3.19E-01	2.50E+00	6.36E-06 +/- 1.17E-05
4	99.83	5.63E-01 +/- 3.35E-01	2.23E+00	1.54E-04 +/- 4.13E-05
5	129.29	5.74E-01 +/- 2.43E-01	2.14E+00	3.01E-04 +/- 2.13E-05
6	311.90	1.46E-01 +/- 1.05E-01	1.75E+00	2.76E-04 +/- 1.41E-05
7	413.70	1.33E-01 +/- 6.95E-02	1.66E+00	2.03E-04 +/- 1.44E-05
8	511.57	3.85E-01 +/- 7.53E-02	1.59E+00	1.62E-04 +/- 1.31E-05
9	1085.91	1.73E-02 +/- 1.22E-02	1.37E+00	8.64E-05 +/- 4.52E-06
10	1333.39	6.82E-02 +/- 2.78E-02	1.33E+00	7.29E-05 +/- 4.34E-06
11	2236.00	1.00E+02 +/- 1.49E+00	1.26E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 114.01 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.088 +/- 0.0080
SE-75	264.65	0.000 +/- 0.0000	0.150 +/- 0.0072
SE-75	279.53	0.000 +/- 0.0000	0.149 +/- 0.0114
SE-75	400.65	0.000 +/- 0.0000	0.211 +/- 0.0193

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.92	8.69E-01 +/- 1.38E-01	3.73E+00	1.85E-05 +/- 1.15E-04
2	60.19	7.43E+00 +/- 3.95E-01	2.60E+00	1.33E-04 +/- 2.14E-04
3	99.57	6.30E-01 +/- 4.22E-01	2.31E+00	3.10E-04 +/- 7.44E-05
4	413.70	2.45E-01 +/- 7.37E-02	1.69E+00	2.89E-04 +/- 1.85E-05
5	559.10	8.00E-02 +/- 4.22E-02	1.59E+00	2.19E-04 +/- 1.55E-05
6	722.01	4.50E-02 +/- 3.34E-02	1.51E+00	1.71E-04 +/- 9.64E-06
7	1408.01	6.20E-02 +/- 3.09E-02	1.34E+00	1.02E-04 +/- 6.88E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.27E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 113.93 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.103 +/- 0.0089
SE-75	264.65	0.000 +/- 0.0000	0.146 +/- 0.0075
SE-75	279.53	0.000 +/- 0.0000	0.196 +/- 0.0138
SE-75	400.65	0.000 +/- 0.0000	0.213 +/- 0.0221

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.03	4.81E-01 +/- 1.40E-01	3.50E+00	3.44E-06 +/- 3.29E-06
2	49.79	2.05E+00 +/- 3.61E-01	2.65E+00	3.81E-05 +/- 1.86E-05
3	60.22	8.05E+00 +/- 4.45E-01	2.47E+00	8.10E-05 +/- 2.79E-05
4	99.49	1.21E+00 +/- 4.29E-01	2.20E+00	2.97E-04 +/- 3.03E-05

5	129.29	7.33E-01	+/-	3.36E-01	2.12E+00	4.18E-04	+/- 2.23E-05
6	148.57	9.01E-01	+/-	3.93E-01	2.08E+00	4.63E-04	+/- 2.25E-05
7	311.90	2.19E-01	+/-	1.46E-01	1.73E+00	4.04E-04	+/- 1.79E-05
8	375.86	1.80E-01	+/-	1.27E-01	1.71E+00	3.46E-04	+/- 1.40E-05
9	413.70	1.48E-01	+/-	8.01E-02	1.69E+00	3.16E-04	+/- 1.28E-05
10	511.36	1.57E-01	+/-	7.69E-02	1.61E+00	2.55E-04	+/- 1.13E-05
11	867.39	3.47E-02	+/-	1.74E-02	1.45E+00	1.51E-04	+/- 6.93E-06
12	2236.00	1.00E+02	+/-	1.50E+00	1.27E+00	1.32E-04	+/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 113.71 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.139 +/- 0.0096
SE-75	264.65	0.000 +/- 0.0000	0.268 +/- 0.0100
SE-75	279.53	0.000 +/- 0.0000	0.268 +/- 0.0168
SE-75	400.65	0.000 +/- 0.0000	0.346 +/- 0.0244

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
	1	31.92	9.56E-01	+/-	1.94E-01	3.11E+00	1.12E-07	+/-	6.90E-07
	2	60.20	1.23E+01	+/-	5.42E-01	2.24E+00	3.63E-05	+/-	5.77E-05
	3	99.50	1.21E+00	+/-	5.07E-01	2.01E+00	2.65E-04	+/-	6.31E-05
	4	115.59	7.50E-01	+/-	4.11E-01	1.97E+00	3.54E-04	+/-	2.93E-05
	5	129.29	1.13E+00	+/-	3.70E-01	1.94E+00	4.12E-04	+/-	2.61E-05
M	6	342.44	1.04E-01	+/-	1.17E-02	1.51E+00	3.49E-04	+/-	1.65E-05
m	7	345.87	1.39E-01	+/-	1.31E-02	1.51E+00	3.46E-04	+/-	1.65E-05
	8	375.80	4.10E-01	+/-	1.26E-01	1.48E+00	3.21E-04	+/-	1.71E-05
	9	413.70	4.12E-01	+/-	9.91E-02	1.45E+00	2.94E-04	+/-	1.78E-05
	10	558.97	2.10E-01	+/-	5.41E-02	1.38E+00	2.22E-04	+/-	1.49E-05
	11	662.42	7.59E-02	+/-	3.19E-02	1.35E+00	1.90E-04	+/-	1.13E-05
	12	2236.00	1.00E+02	+/-	1.50E+00	1.18E+00	7.00E-05	+/-	3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 113.40 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.101 +/- 0.0126
SE-75	264.65	0.000 +/- 0.0000	0.163 +/- 0.0089
SE-75	279.53	0.000 +/- 0.0000	0.175 +/- 0.0153
SE-75	400.65	0.000 +/- 0.0000	0.198 +/- 0.0210

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.12	1.58E+00 +/- 2.41E-01	3.51E+00	2.85E-07 +/- 1.87E-06
2	60.22	1.84E+01 +/- 6.48E-01	2.48E+00	4.81E-05 +/- 8.25E-05
3	99.53	1.60E+00 +/- 6.52E-01	2.21E+00	2.79E-04 +/- 7.06E-05
4	129.29	2.01E+00 +/- 4.61E-01	2.13E+00	4.07E-04 +/- 2.65E-05
5	375.61	4.81E-01 +/- 1.37E-01	1.75E+00	3.11E-04 +/- 1.79E-05
6	393.46	2.93E-01 +/- 1.10E-01	1.74E+00	2.99E-04 +/- 1.85E-05
7	413.70	6.63E-01 +/- 1.11E-01	1.73E+00	2.86E-04 +/- 1.90E-05
8	559.30	1.76E-01 +/- 6.86E-02	1.62E+00	2.20E-04 +/- 1.62E-05
9	1001.03	5.33E-02 +/- 3.28E-02	1.43E+00	1.35E-04 +/- 6.17E-06
10	1112.12	4.15E-02 +/- 2.71E-02	1.40E+00	1.23E-04 +/- 5.54E-06
11	2236.00	1.00E+02 +/- 1.50E+00	1.29E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 112.44 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.174 +/- 0.0166
SE-75	264.65	0.000 +/- 0.0000	0.264 +/- 0.0111
SE-75	279.53	0.000 +/- 0.0000	0.245 +/- 0.0200
SE-75	400.65	0.000 +/- 0.0000	0.315 +/- 0.0312

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.87	1.03E+00 +/- 2.42E-01	2.82E+00	4.43E-07 +/- 2.81E-06
	2	49.49	9.35E-01 +/- 6.61E-01	2.20E+00	2.02E-05 +/- 5.35E-05
	3	60.18	2.90E+01 +/- 8.80E-01	2.07E+00	6.09E-05 +/- 9.94E-05
	4	99.28	4.83E+00 +/- 7.94E-01	1.88E+00	3.05E-04 +/- 7.52E-05
	5	111.66	1.18E+00 +/- 5.77E-01	1.85E+00	3.68E-04 +/- 4.00E-05
M	6	126.00	1.00E+00 +/- 2.57E-01	1.82E+00	4.22E-04 +/- 2.47E-05
m	7	129.99	9.49E+00 +/- 6.22E-01	1.82E+00	4.33E-04 +/- 2.80E-05
	8	208.72	3.74E+00 +/- 5.21E-01	1.67E+00	4.72E-04 +/- 5.09E-05
	9	255.80	7.30E-01 +/- 3.53E-01	1.60E+00	4.33E-04 +/- 3.10E-05
	10	311.90	8.06E-01 +/- 4.07E-01	1.59E+00	3.82E-04 +/- 1.81E-05
M	11	333.47	2.95E+00 +/- 3.31E-01	1.57E+00	3.65E-04 +/- 1.73E-05
m	12	336.67	8.03E-01 +/- 1.57E-01	1.56E+00	3.62E-04 +/- 1.73E-05
	13	345.68	2.74E+00 +/- 2.71E-01	1.55E+00	3.55E-04 +/- 1.74E-05
	14	368.83	8.57E-01 +/- 2.65E-01	1.53E+00	3.38E-04 +/- 1.82E-05
	15	375.70	5.62E+00 +/- 4.30E-01	1.52E+00	3.34E-04 +/- 1.84E-05
M	16	380.83	1.24E+00 +/- 1.81E-01	1.52E+00	3.30E-04 +/- 1.86E-05
m	17	383.46	1.23E+00 +/- 1.73E-01	1.52E+00	3.28E-04 +/- 1.87E-05
	18	393.60	2.85E+00 +/- 2.61E-01	1.51E+00	3.22E-04 +/- 1.90E-05
F	19	414.35	7.84E+00 +/- 7.77E-01	1.49E+00	3.09E-04 +/- 1.95E-05
	20	423.05	5.80E-01 +/- 1.15E-01	1.49E+00	3.04E-04 +/- 1.96E-05
	21	452.19	8.02E-01 +/- 1.37E-01	1.47E+00	2.88E-04 +/- 1.97E-05
F	22	663.13	3.48E-01 +/- 9.59E-02	1.38E+00	2.10E-04 +/- 1.26E-05
	23	722.01	1.01E-01 +/- 5.90E-02	1.36E+00	1.95E-04 +/- 1.05E-05
	24	2236.00	1.00E+02 +/- 1.51E+00	1.20E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 106.76 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.110 +/- 0.0194
SE-75	264.65	0.000 +/- 0.0000	0.242 +/- 0.0136
SE-75	279.53	0.000 +/- 0.0000	0.202 +/- 0.0289
SE-75	400.65	0.000 +/- 0.0000	0.264 +/- 0.0443

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.00	3.92E+00 +/- 4.19E-01	3.41E+00	4.82E-09 +/- 2.77E-08
	2	50.38	5.35E+00 +/- 1.20E+00	2.58E+00	3.09E-06 +/- 7.15E-06
	3	60.19	1.26E+02 +/- 2.17E+00	2.42E+00	1.61E-05 +/- 2.39E-05
	4	99.35	3.83E+01 +/- 1.54E+00	2.16E+00	2.43E-04 +/- 5.52E-05
	5	111.70	1.29E+01 +/- 1.20E+00	2.12E+00	3.35E-04 +/- 3.48E-05
M	6	125.93	8.37E+00 +/- 5.10E-01	2.09E+00	4.24E-04 +/- 2.46E-05
m	7	130.00	7.57E+01 +/- 1.72E+00	2.08E+00	4.45E-04 +/- 2.77E-05
	8	144.84	1.59E+00 +/- 9.19E-01	2.02E+00	5.05E-04 +/- 4.48E-05
	9	148.57	1.64E+00 +/- 8.84E-01	2.00E+00	5.16E-04 +/- 4.85E-05
	10	161.77	3.49E+00 +/- 9.78E-01	1.95E+00	5.43E-04 +/- 5.78E-05
	11	172.08	3.72E+00 +/- 1.08E+00	1.90E+00	5.55E-04 +/- 6.09E-05
	12	189.92	3.51E+00 +/- 9.77E-01	1.84E+00	5.58E-04 +/- 5.97E-05
	13	196.34	2.01E+00 +/- 7.91E-01	1.82E+00	5.56E-04 +/- 5.79E-05
	14	204.19	6.08E+00 +/- 1.15E+00	1.80E+00	5.51E-04 +/- 5.50E-05
	15	208.67	1.38E+01 +/- 1.23E+00	1.78E+00	5.47E-04 +/- 5.32E-05
	16	244.70	1.43E+00 +/- 7.01E-01	1.68E+00	5.05E-04 +/- 3.65E-05
	17	255.99	3.95E+00 +/- 6.35E-01	1.66E+00	4.90E-04 +/- 3.18E-05
M	18	264.31	1.13E+00 +/- 4.03E-01	1.64E+00	4.79E-04 +/- 2.87E-05
m	19	268.16	1.16E+00 +/- 4.12E-01	1.66E+00	4.74E-04 +/- 2.74E-05
	20	273.68	8.26E-01 +/- 5.17E-01	1.69E+00	4.66E-04 +/- 2.57E-05
	21	298.15	2.32E+00 +/- 8.65E-01	1.70E+00	4.34E-04 +/- 2.02E-05
	22	311.90	3.09E+00 +/- 6.01E-01	1.69E+00	4.17E-04 +/- 1.86E-05
M	23	321.59	2.19E+00 +/- 3.62E-01	1.68E+00	4.05E-04 +/- 1.79E-05
m	24	324.16	2.96E+00 +/- 4.14E-01	1.67E+00	4.02E-04 +/- 1.78E-05
M	25	333.40	2.64E+01 +/- 8.70E-01	1.66E+00	3.91E-04 +/- 1.76E-05
m	26	336.42	8.64E+00 +/- 4.20E-01	1.66E+00	3.88E-04 +/- 1.76E-05
	27	345.66	2.38E+01 +/- 7.05E-01	1.65E+00	3.78E-04 +/- 1.76E-05
	28	368.68	8.15E+00 +/- 6.94E-01	1.62E+00	3.55E-04 +/- 1.81E-05
	29	375.67	4.81E+01 +/- 1.33E+00	1.62E+00	3.49E-04 +/- 1.82E-05
M	30	380.81	1.13E+01 +/- 5.14E-01	1.61E+00	3.44E-04 +/- 1.83E-05
m	31	383.40	1.17E+01 +/- 5.12E-01	1.61E+00	3.42E-04 +/- 1.84E-05
	32	393.55	2.47E+01 +/- 6.93E-01	1.60E+00	3.33E-04 +/- 1.86E-05
F	33	414.35	6.59E+01 +/- 1.43E+00	1.58E+00	3.16E-04 +/- 1.88E-05
	34	423.16	3.62E+00 +/- 3.78E-01	1.58E+00	3.10E-04 +/- 1.88E-05
	35	452.04	7.43E+00 +/- 3.71E-01	1.56E+00	2.90E-04 +/- 1.86E-05
	36	619.39	6.20E-01 +/- 1.48E-01	1.47E+00	2.16E-04 +/- 1.32E-05
	37	640.84	5.27E-01 +/- 1.41E-01	1.46E+00	2.09E-04 +/- 1.25E-05
	38	646.41	3.44E-01 +/- 1.27E-01	1.45E+00	2.08E-04 +/- 1.23E-05
M	39	659.29	3.77E-01 +/- 7.94E-02	1.45E+00	2.04E-04 +/- 1.18E-05
m	40	663.05	2.48E+00 +/- 2.39E-01	1.45E+00	2.03E-04 +/- 1.17E-05
M	41	718.67	2.46E-01 +/- 6.18E-02	1.43E+00	1.90E-04 +/- 1.01E-05
m	42	722.71	1.16E+00 +/- 1.64E-01	1.42E+00	1.89E-04 +/- 9.97E-06

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	756.83	1.27E-01 +/- 6.23E-02	1.41E+00	1.82E-04 +/- 9.17E-06
44	769.79	3.45E-01 +/- 9.14E-02	1.41E+00	1.79E-04 +/- 8.90E-06
45	778.90	5.52E-02 +/- 4.37E-02	1.41E+00	1.77E-04 +/- 8.73E-06
46	1044.79	4.67E-02 +/- 3.39E-02	1.34E+00	1.40E-04 +/- 6.03E-06
47	1112.12	1.03E-01 +/- 4.51E-02	1.33E+00	1.32E-04 +/- 5.60E-06
48	2236.00	1.00E+02 +/- 1.54E+00	1.23E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 103.30 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.128 +/- 0.0187
SE-75	264.65	0.000 +/- 0.0000	0.242 +/- 0.0181
SE-75	279.53	0.000 +/- 0.0000	0.259 +/- 0.0379
SE-75	400.65	0.000 +/- 0.0000	0.284 +/- 0.0565

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.96	5.32E+00 +/- 5.12E-01	3.21E+00	7.53E-06 +/- 7.35E-06
	2	50.32	2.82E+00 +/- 1.19E+00	2.45E+00	6.06E-05 +/- 2.96E-05
	3	60.18	1.87E+02 +/- 2.97E+00	2.30E+00	1.10E-04 +/- 3.84E-05
	4	99.34	5.83E+01 +/- 1.92E+00	2.07E+00	3.24E-04 +/- 3.31E-05
	5	111.69	1.94E+01 +/- 1.42E+00	2.03E+00	3.75E-04 +/- 2.72E-05
M	6	125.91	1.14E+01 +/- 6.09E-01	2.00E+00	4.19E-04 +/- 2.31E-05
m	7	129.97	1.14E+02 +/- 2.27E+00	1.99E+00	4.29E-04 +/- 2.26E-05
	8	144.77	3.09E+00 +/- 1.08E+00	1.94E+00	4.57E-04 +/- 2.25E-05
	9	148.57	1.97E+00 +/- 1.03E+00	1.93E+00	4.62E-04 +/- 2.28E-05
	10	161.65	3.58E+00 +/- 1.08E+00	1.89E+00	4.75E-04 +/- 2.42E-05
	11	172.06	6.60E+00 +/- 1.33E+00	1.85E+00	4.80E-04 +/- 2.51E-05
	12	179.83	1.40E+00 +/- 7.98E-01	1.83E+00	4.81E-04 +/- 2.57E-05
	13	189.96	3.11E+00 +/- 8.63E-01	1.80E+00	4.81E-04 +/- 2.61E-05
	14	196.39	5.46E+00 +/- 1.06E+00	1.79E+00	4.79E-04 +/- 2.62E-05
	15	204.19	1.30E+01 +/- 1.11E+00	1.77E+00	4.76E-04 +/- 2.61E-05
	16	208.67	2.05E+01 +/- 1.50E+00	1.76E+00	4.74E-04 +/- 2.60E-05
	17	256.08	5.46E+00 +/- 8.45E-01	1.65E+00	4.39E-04 +/- 2.28E-05
M	18	264.60	2.04E+00 +/- 4.60E-01	1.63E+00	4.32E-04 +/- 2.21E-05
m	19	268.05	2.26E+00 +/- 4.80E-01	1.63E+00	4.29E-04 +/- 2.17E-05

	20	298.13	3.09E+00	+/-	7.06E-01	1.59E+00	4.01E-04	+/-	1.90E-05
	21	311.90	5.71E+00	+/-	8.81E-01	1.59E+00	3.88E-04	+/-	1.78E-05
M	22	321.59	3.52E+00	+/-	4.60E-01	1.58E+00	3.80E-04	+/-	1.71E-05
m	23	324.08	4.97E+00	+/-	5.40E-01	1.58E+00	3.77E-04	+/-	1.69E-05
M	24	333.39	3.48E+01	+/-	1.08E+00	1.58E+00	3.69E-04	+/-	1.62E-05
m	25	336.39	1.04E+01	+/-	5.06E-01	1.58E+00	3.67E-04	+/-	1.60E-05
M	26	342.11	4.90E+00	+/-	3.42E-01	1.57E+00	3.62E-04	+/-	1.57E-05
m	27	345.62	3.81E+01	+/-	1.11E+00	1.57E+00	3.59E-04	+/-	1.54E-05
	28	368.78	1.04E+01	+/-	8.53E-01	1.56E+00	3.40E-04	+/-	1.42E-05
	29	375.66	6.95E+01	+/-	1.71E+00	1.56E+00	3.34E-04	+/-	1.38E-05
M	30	380.81	1.78E+01	+/-	6.79E-01	1.56E+00	3.30E-04	+/-	1.36E-05
m	31	383.38	1.63E+01	+/-	6.21E-01	1.56E+00	3.28E-04	+/-	1.35E-05
	32	393.49	3.69E+01	+/-	8.83E-01	1.56E+00	3.21E-04	+/-	1.31E-05
	33	413.70	9.88E+01	+/-	1.60E+00	1.54E+00	3.06E-04	+/-	1.25E-05
	34	423.11	5.00E+00	+/-	4.65E-01	1.54E+00	3.00E-04	+/-	1.22E-05
	35	452.03	1.17E+01	+/-	4.33E-01	1.52E+00	2.82E-04	+/-	1.16E-05
	36	511.39	8.45E-01	+/-	2.25E-01	1.49E+00	2.50E-04	+/-	1.09E-05
	37	619.70	5.02E-01	+/-	1.93E-01	1.44E+00	2.06E-04	+/-	9.86E-06
	38	646.36	5.74E-01	+/-	1.48E-01	1.43E+00	1.98E-04	+/-	9.58E-06
	39	653.20	4.03E-01	+/-	1.86E-01	1.42E+00	1.96E-04	+/-	9.51E-06
M	40	659.48	3.75E-01	+/-	8.52E-02	1.42E+00	1.94E-04	+/-	9.44E-06
m	41	663.01	3.60E+00	+/-	3.02E-01	1.42E+00	1.93E-04	+/-	9.40E-06
	42	710.17	1.25E-01	+/-	7.84E-02	1.40E+00	1.81E-04	+/-	8.86E-06

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
M	43	718.40	3.88E-01 +/- 7.37E-02	1.40E+00	1.79E-04 +/- 8.76E-06
m	44	722.57	1.87E+00 +/- 2.03E-01	1.40E+00	1.78E-04 +/- 8.71E-06
	45	756.90	2.12E-01 +/- 8.63E-02	1.39E+00	1.70E-04 +/- 8.28E-06
	46	769.89	5.35E-01 +/- 1.03E-01	1.38E+00	1.68E-04 +/- 8.12E-06
	47	1085.91	4.82E-02 +/- 2.89E-02	1.31E+00	1.28E-04 +/- 4.75E-06
	48	2236.00	1.00E+02 +/- 1.57E+00	1.22E+00	1.19E-04 +/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 108.60 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.290 +/- 0.0173
SE-75	264.65	0.000 +/- 0.0000	0.491 +/- 0.0168
SE-75	279.53	0.000 +/- 0.0000	0.407 +/- 0.0326
SE-75	400.65	0.000 +/- 0.0000	0.490 +/- 0.0478

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.99	4.86E+00 +/- 4.65E-01	2.19E+00	6.03E-09 +/- 3.64E-08
	2	50.55	4.31E+00 +/- 9.42E-01	1.79E+00	3.41E-06 +/- 8.24E-06
	3	60.19	1.33E+02 +/- 2.20E+00	1.71E+00	1.66E-05 +/- 2.59E-05
	4	95.27	1.90E+00 +/- 7.37E-01	1.60E+00	2.06E-04 +/- 6.13E-05
	5	99.39	3.05E+01 +/- 1.34E+00	1.59E+00	2.36E-04 +/- 5.57E-05
	6	111.71	6.20E+00 +/- 1.15E+00	1.57E+00	3.22E-04 +/- 3.46E-05
	7	116.11	4.15E+00 +/- 1.21E+00	1.57E+00	3.50E-04 +/- 2.80E-05
M	8	123.93	5.91E-01 +/- 1.51E-01	1.56E+00	3.94E-04 +/- 2.34E-05
m	9	126.00	6.46E+00 +/- 1.94E-01	1.55E+00	4.05E-04 +/- 2.41E-05
m	10	130.00	5.48E+01 +/- 7.72E-01	1.55E+00	4.24E-04 +/- 2.73E-05
	11	144.82	2.82E+00 +/- 7.22E-01	1.52E+00	4.78E-04 +/- 4.42E-05
	12	148.57	2.40E+00 +/- 7.75E-01	1.51E+00	4.88E-04 +/- 4.79E-05
M	13	161.78	4.53E+00 +/- 7.10E-01	1.48E+00	5.12E-04 +/- 5.69E-05
m	14	165.32	1.68E+00 +/- 4.60E-01	1.47E+00	5.17E-04 +/- 5.82E-05
	15	171.99	2.72E+00 +/- 9.45E-01	1.45E+00	5.22E-04 +/- 5.97E-05
	16	179.94	1.66E+00 +/- 8.05E-01	1.44E+00	5.24E-04 +/- 5.99E-05
	17	196.19	2.46E+00 +/- 8.32E-01	1.40E+00	5.20E-04 +/- 5.64E-05
	18	204.20	1.26E+01 +/- 6.77E-01	1.39E+00	5.14E-04 +/- 5.34E-05
	19	208.67	3.91E+00 +/- 1.14E+00	1.38E+00	5.11E-04 +/- 5.15E-05

	20	256.09	1.93E+00	+/-	4.48E-01	1.31E+00	4.54E-04	+/-	3.03E-05
	21	298.03	1.70E+00	+/-	5.42E-01	1.36E+00	3.99E-04	+/-	1.92E-05
	22	311.90	1.62E+00	+/-	5.34E-01	1.35E+00	3.83E-04	+/-	1.78E-05
M	23	321.44	2.05E+00	+/-	3.56E-01	1.35E+00	3.72E-04	+/-	1.73E-05
m	24	324.07	2.44E+00	+/-	3.68E-01	1.35E+00	3.69E-04	+/-	1.72E-05
M	25	333.44	1.92E+01	+/-	7.27E-01	1.34E+00	3.59E-04	+/-	1.71E-05
m	26	336.49	6.51E+00	+/-	3.55E-01	1.34E+00	3.56E-04	+/-	1.71E-05
	27	345.66	1.56E+01	+/-	5.62E-01	1.33E+00	3.46E-04	+/-	1.72E-05
	28	368.75	4.87E+00	+/-	5.94E-01	1.32E+00	3.24E-04	+/-	1.76E-05
	29	375.69	3.33E+01	+/-	1.09E+00	1.31E+00	3.18E-04	+/-	1.78E-05
M	30	380.81	8.42E+00	+/-	4.60E-01	1.31E+00	3.14E-04	+/-	1.79E-05
m	31	383.45	7.04E+00	+/-	3.95E-01	1.31E+00	3.12E-04	+/-	1.80E-05
	32	393.57	1.66E+01	+/-	5.67E-01	1.30E+00	3.03E-04	+/-	1.81E-05
F	33	414.36	4.68E+01	+/-	2.37E+00	1.29E+00	2.88E-04	+/-	1.83E-05
	34	423.24	2.94E+00	+/-	2.97E-01	1.29E+00	2.82E-04	+/-	1.83E-05
	35	452.08	6.06E+00	+/-	3.08E-01	1.28E+00	2.63E-04	+/-	1.81E-05
	36	511.82	8.10E-01	+/-	1.53E-01	1.26E+00	2.33E-04	+/-	1.66E-05
	37	619.53	4.25E-01	+/-	1.40E-01	1.24E+00	1.95E-04	+/-	1.26E-05
	38	646.60	3.12E-01	+/-	9.99E-02	1.23E+00	1.88E-04	+/-	1.17E-05
M	39	659.48	3.18E-01	+/-	7.81E-02	1.23E+00	1.85E-04	+/-	1.13E-05
m	40	663.04	1.94E+00	+/-	2.33E-01	1.23E+00	1.84E-04	+/-	1.11E-05
M	41	718.88	8.04E-02	+/-	3.57E-02	1.22E+00	1.72E-04	+/-	9.52E-06
m	42	722.65	8.77E-01	+/-	1.42E-01	1.22E+00	1.71E-04	+/-	9.43E-06

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	769.80	3.91E-01 +/- 9.56E-02	1.21E+00	1.63E-04 +/- 8.38E-06
44	2236.00	1.00E+02 +/- 1.53E+00	1.12E+00	6.12E-05 +/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 112.30 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.172 +/- 0.0126
SE-75	264.65	0.000 +/- 0.0000	0.256 +/- 0.0115
SE-75	279.53	0.000 +/- 0.0000	0.270 +/- 0.0194
SE-75	400.65	0.000 +/- 0.0000	0.310 +/- 0.0260

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.99	1.84E+00 +/- 2.54E-01	2.83E+00	1.65E-05 +/- 1.64E-05
	2	50.18	2.47E+00 +/- 7.37E-01	2.20E+00	8.48E-05 +/- 4.23E-05
	3	60.20	1.24E+02 +/- 1.97E+00	2.08E+00	1.37E-04 +/- 4.88E-05
	4	99.39	4.71E+00 +/- 8.66E-01	1.89E+00	3.30E-04 +/- 3.40E-05
	5	111.62	2.10E+00 +/- 6.57E-01	1.86E+00	3.71E-04 +/- 2.74E-05
M	6	123.99	9.15E-01 +/- 2.51E-01	1.83E+00	4.04E-04 +/- 2.31E-05
m	7	126.02	2.32E+00 +/- 2.81E-01	1.83E+00	4.08E-04 +/- 2.27E-05
m	8	130.00	1.27E+01 +/- 6.65E-01	1.82E+00	4.16E-04 +/- 2.21E-05
	9	148.57	1.87E+00 +/- 6.64E-01	1.79E+00	4.43E-04 +/- 2.22E-05
	10	204.19	1.24E+00 +/- 3.68E-01	1.69E+00	4.57E-04 +/- 2.52E-05
	11	208.67	9.82E-01 +/- 5.25E-01	1.68E+00	4.56E-04 +/- 2.51E-05
	12	279.54	5.74E-01 +/- 3.95E-01	1.58E+00	4.12E-04 +/- 2.03E-05
	13	300.10	8.58E-01 +/- 3.83E-01	1.57E+00	3.96E-04 +/- 1.86E-05
	14	311.90	5.80E-01 +/- 3.21E-01	1.56E+00	3.87E-04 +/- 1.76E-05
	15	333.49	2.79E+00 +/- 3.85E-01	1.55E+00	3.71E-04 +/- 1.62E-05
	16	345.66	2.13E+00 +/- 2.50E-01	1.54E+00	3.62E-04 +/- 1.54E-05
	17	368.77	8.97E-01 +/- 2.62E-01	1.53E+00	3.45E-04 +/- 1.43E-05
	18	375.72	4.13E+00 +/- 4.07E-01	1.52E+00	3.40E-04 +/- 1.40E-05
M	19	380.86	1.04E+00 +/- 1.61E-01	1.52E+00	3.37E-04 +/- 1.38E-05
m	20	383.40	1.01E+00 +/- 1.56E-01	1.52E+00	3.35E-04 +/- 1.37E-05
	21	393.53	2.36E+00 +/- 2.04E-01	1.51E+00	3.28E-04 +/- 1.34E-05
F	22	414.37	6.17E+00 +/- 3.93E-01	1.50E+00	3.15E-04 +/- 1.28E-05
	23	423.25	5.55E-01 +/- 1.29E-01	1.50E+00	3.09E-04 +/- 1.27E-05

	24	443.98	1.58E-01	+/-	8.91E-02	1.48E+00	2.97E-04	+/- 1.23E-05
	25	452.09	8.62E-01	+/-	1.15E-01	1.48E+00	2.93E-04	+/- 1.22E-05
	26	478.80	8.80E-02	+/-	5.47E-02	1.47E+00	2.78E-04	+/- 1.19E-05
F	27	663.24	2.75E-01	+/-	1.30E-01	1.39E+00	2.05E-04	+/- 1.03E-05
F	28	722.49	2.39E-01	+/-	8.06E-02	1.37E+00	1.89E-04	+/- 9.54E-06
	29	2236.00	1.00E+02	+/-	1.51E+00	1.20E+00	9.04E-05	+/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 113.02 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.330 +/- 0.0167
SE-75	264.65	0.000 +/- 0.0000	0.448 +/- 0.0142
SE-75	279.53	0.000 +/- 0.0000	0.466 +/- 0.0218
SE-75	400.65	0.000 +/- 0.0000	0.470 +/- 0.0306

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
	1	32.24	1.56E+00	+/-	2.54E-01	2.03E+00	1.31E-03	+/-	8.38E-03
	2	49.98	4.43E+00	+/-	7.40E-01	1.70E+00	6.01E-04	+/-	1.60E-03
	3	60.21	1.28E+02	+/-	1.98E+00	1.63E+00	5.03E-04	+/-	8.45E-04
	4	99.42	4.79E+00	+/-	6.51E-01	1.52E+00	4.09E-04	+/-	1.03E-04
	5	111.61	1.45E+00	+/-	5.17E-01	1.51E+00	4.03E-04	+/-	4.50E-05
M	6	126.00	1.38E+00	+/-	2.28E-01	1.49E+00	4.00E-04	+/-	2.38E-05
m	7	130.04	7.10E+00	+/-	5.07E-01	1.49E+00	3.99E-04	+/-	2.64E-05
	8	148.57	1.23E+00	+/-	5.17E-01	1.46E+00	3.97E-04	+/-	4.23E-05
	9	208.69	1.15E+00	+/-	3.22E-01	1.39E+00	3.88E-04	+/-	4.34E-05
	10	311.90	3.49E-01	+/-	2.49E-01	1.32E+00	3.53E-04	+/-	1.69E-05
	11	333.51	7.80E-01	+/-	2.64E-01	1.32E+00	3.43E-04	+/-	1.63E-05
	12	345.68	7.66E-01	+/-	1.76E-01	1.32E+00	3.38E-04	+/-	1.66E-05
	13	375.68	1.46E+00	+/-	2.13E-01	1.31E+00	3.25E-04	+/-	1.79E-05
	14	393.63	5.75E-01	+/-	1.10E-01	1.31E+00	3.17E-04	+/-	1.87E-05
	15	413.70	1.58E+00	+/-	1.39E-01	1.31E+00	3.08E-04	+/-	1.94E-05
	16	423.27	1.57E-01	+/-	7.24E-02	1.31E+00	3.04E-04	+/-	1.97E-05
	17	452.17	2.19E-01	+/-	6.05E-02	1.30E+00	2.92E-04	+/-	2.00E-05
	18	510.95	3.19E-01	+/-	7.10E-02	1.28E+00	2.67E-04	+/-	1.91E-05
	19	662.42	8.79E-02	+/-	5.81E-02	1.24E+00	2.15E-04	+/-	1.30E-05
	20	2236.00	1.00E+02	+/-	1.50E+00	1.13E+00	5.79E-05	+/-	3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.34 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.197 +/- 0.0131
SE-75	264.65	0.000 +/- 0.0000	0.305 +/- 0.0107
SE-75	279.53	0.000 +/- 0.0000	0.302 +/- 0.0157
SE-75	400.65	0.000 +/- 0.0000	0.334 +/- 0.0258

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.95	7.90E-01 +/- 1.72E-01	2.66E+00	2.25E-09 +/- 1.39E-08
	2	50.27	4.79E+00 +/- 7.95E-01	2.09E+00	2.20E-06 +/- 5.50E-06
	3	60.21	1.06E+02 +/- 1.73E+00	1.98E+00	1.31E-05 +/- 2.09E-05
	4	99.44	5.08E+00 +/- 5.25E-01	1.81E+00	2.33E-04 +/- 5.59E-05
M	5	126.01	1.58E+00 +/- 2.25E-01	1.76E+00	4.17E-04 +/- 2.45E-05
m	6	130.01	4.73E+00 +/- 4.12E-01	1.75E+00	4.38E-04 +/- 2.82E-05
	7	208.80	9.81E-01 +/- 3.32E-01	1.60E+00	5.31E-04 +/- 5.52E-05
M	8	333.33	6.48E-01 +/- 1.46E-01	1.50E+00	3.62E-04 +/- 1.72E-05
m	9	336.59	3.56E-01 +/- 9.92E-02	1.50E+00	3.59E-04 +/- 1.72E-05
	10	345.90	4.57E-01 +/- 1.91E-01	1.49E+00	3.49E-04 +/- 1.72E-05
	11	375.77	1.19E+00 +/- 1.66E-01	1.48E+00	3.19E-04 +/- 1.79E-05
	12	393.70	2.34E-01 +/- 1.07E-01	1.48E+00	3.03E-04 +/- 1.82E-05
	13	413.70	1.13E+00 +/- 1.25E-01	1.47E+00	2.87E-04 +/- 1.84E-05
	14	423.20	1.74E-01 +/- 6.80E-02	1.46E+00	2.81E-04 +/- 1.84E-05
	15	559.08	1.46E-01 +/- 6.61E-02	1.40E+00	2.11E-04 +/- 1.50E-05
	16	662.42	2.05E-01 +/- 5.08E-02	1.36E+00	1.82E-04 +/- 1.13E-05
	17	1001.03	7.51E-02 +/- 4.70E-02	1.28E+00	1.35E-04 +/- 6.07E-06
	18	2236.00	1.00E+02 +/- 1.50E+00	1.19E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.58 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.289 +/- 0.0141
SE-75	264.65	0.000 +/- 0.0000	0.403 +/- 0.0127
SE-75	279.53	0.000 +/- 0.0000	0.389 +/- 0.0183
SE-75	400.65	0.000 +/- 0.0000	0.469 +/- 0.0289

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.03	6.75E-01 +/- 1.65E-01	2.19E+00	1.73E-08 +/- 1.13E-07
	2	50.52	2.18E+00 +/- 5.55E-01	1.79E+00	5.46E-06 +/- 1.43E-05
	3	60.21	8.07E+01 +/- 1.43E+00	1.71E+00	2.30E-05 +/- 3.89E-05
	4	99.48	2.87E+00 +/- 4.91E-01	1.59E+00	2.51E-04 +/- 6.28E-05
M	5	125.98	8.32E-01 +/- 1.74E-01	1.56E+00	4.03E-04 +/- 2.40E-05
m	6	129.98	3.46E+00 +/- 3.70E-01	1.55E+00	4.19E-04 +/- 2.77E-05
	7	148.57	6.58E-01 +/- 3.92E-01	1.52E+00	4.73E-04 +/- 5.02E-05
	8	208.64	1.17E+00 +/- 2.80E-01	1.44E+00	4.88E-04 +/- 5.34E-05
	9	333.34	5.24E-01 +/- 1.40E-01	1.36E+00	3.53E-04 +/- 1.73E-05
	10	345.65	3.02E-01 +/- 1.19E-01	1.35E+00	3.41E-04 +/- 1.75E-05
	11	375.82	3.72E-01 +/- 1.66E-01	1.33E+00	3.16E-04 +/- 1.85E-05
	12	383.23	3.57E-01 +/- 1.02E-01	1.33E+00	3.11E-04 +/- 1.87E-05
	13	393.56	1.47E-01 +/- 7.66E-02	1.32E+00	3.03E-04 +/- 1.90E-05
	14	413.70	6.47E-01 +/- 1.00E-01	1.31E+00	2.89E-04 +/- 1.94E-05
	15	443.98	8.22E-02 +/- 5.52E-02	1.30E+00	2.71E-04 +/- 1.95E-05
	16	722.01	1.18E-01 +/- 5.78E-02	1.23E+00	1.80E-04 +/- 1.01E-05
	17	778.90	2.79E-02 +/- 2.35E-02	1.22E+00	1.70E-04 +/- 8.63E-06
	18	867.39	4.79E-02 +/- 3.77E-02	1.21E+00	1.57E-04 +/- 7.21E-06
	19	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 113.86 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.365 +/- 0.0151
SE-75	264.65	0.000 +/- 0.0000	0.488 +/- 0.0139
SE-75	279.53	0.000 +/- 0.0000	0.458 +/- 0.0190
SE-75	400.65	0.000 +/- 0.0000	0.542 +/- 0.0310

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	49.35	2.67E+00 +/- 5.65E-01	1.63E+00	4.35E-05 +/- 1.11E-04
2	60.20	4.58E+01 +/- 9.81E-01	1.56E+00	9.60E-05 +/- 1.50E-04
3	99.42	1.23E+00 +/- 4.06E-01	1.47E+00	3.19E-04 +/- 7.52E-05
4	115.57	7.18E-01 +/- 3.39E-01	1.45E+00	3.83E-04 +/- 3.11E-05
5	129.29	8.27E-01 +/- 3.51E-01	1.44E+00	4.20E-04 +/- 2.62E-05
6	208.77	1.03E+00 +/- 2.48E-01	1.35E+00	4.54E-04 +/- 4.69E-05
7	345.34	1.69E-01 +/- 7.60E-02	1.28E+00	3.44E-04 +/- 1.65E-05
8	375.66	1.93E-01 +/- 7.35E-02	1.26E+00	3.22E-04 +/- 1.72E-05
9	383.17	1.44E-01 +/- 7.14E-02	1.26E+00	3.17E-04 +/- 1.74E-05
10	413.70	4.12E-01 +/- 8.60E-02	1.25E+00	2.98E-04 +/- 1.80E-05
11	618.32	8.63E-02 +/- 4.18E-02	1.20E+00	2.08E-04 +/- 1.30E-05
12	1408.01	2.60E-02 +/- 1.50E-02	1.13E+00	1.05E-04 +/- 7.02E-06
13	2236.00	1.00E+02 +/- 1.50E+00	1.10E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.02 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.588 +/- 0.0186
SE-75	264.65	0.000 +/- 0.0000	0.692 +/- 0.0178
SE-75	279.53	0.000 +/- 0.0000	0.669 +/- 0.0233
SE-75	400.65	0.000 +/- 0.0000	0.732 +/- 0.0373

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.82	4.60E-01 +/- 1.34E-01	1.45E+00	1.02E-09 +/- 6.52E-09
	2	50.28	1.41E+00 +/- 3.92E-01	1.31E+00	1.89E-06 +/- 4.87E-06
	3	60.19	2.97E+01 +/- 7.56E-01	1.28E+00	1.24E-05 +/- 2.03E-05
M	4	126.09	4.74E-01 +/- 1.34E-01	1.22E+00	4.06E-04 +/- 2.38E-05
m	5	130.14	1.30E+00 +/- 2.30E-01	1.22E+00	4.24E-04 +/- 2.77E-05
	6	208.99	5.37E-01 +/- 1.81E-01	1.17E+00	4.80E-04 +/- 5.22E-05
	7	333.33	1.35E-01 +/- 9.44E-02	1.14E+00	3.24E-04 +/- 1.53E-05
	8	375.74	1.68E-01 +/- 8.04E-02	1.13E+00	2.88E-04 +/- 1.59E-05

9	393.90	2.26E-01	+/-	6.65E-02	1.13E+00	2.75E-04	+/- 1.62E-05
10	413.70	2.50E-01	+/-	6.89E-02	1.12E+00	2.62E-04	+/- 1.65E-05
11	511.30	2.42E-01	+/-	7.31E-02	1.11E+00	2.15E-04	+/- 1.54E-05
12	722.01	6.50E-02	+/-	3.79E-02	1.09E+00	1.64E-04	+/- 9.17E-06
13	1333.26	1.23E-01	+/-	3.94E-02	1.06E+00	9.75E-05	+/- 5.41E-06
14	2236.00	1.00E+02	+/-	1.49E+00	1.05E+00	3.18E-05	+/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.15 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.568 +/- 0.0181
SE-75	264.65	0.000 +/- 0.0000	0.612 +/- 0.0162
SE-75	279.53	0.000 +/- 0.0000	0.613 +/- 0.0223
SE-75	400.65	0.000 +/- 0.0000	0.681 +/- 0.0349

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
1	32.17	3.18E-01	+/-	9.27E-02	1.48E+00	4.12E-06	+/-	4.91E-06
2	50.06	8.03E-01	+/-	3.20E-01	1.33E+00	3.05E-05	+/-	1.85E-05
3	60.22	1.14E+01	+/-	4.55E-01	1.30E+00	5.63E-05	+/-	2.42E-05
4	208.44	4.08E-01	+/-	1.74E-01	1.21E+00	2.62E-04	+/-	1.78E-05
5	413.70	1.04E-01	+/-	5.90E-02	1.15E+00	1.79E-04	+/-	8.85E-06
6	559.23	1.65E-01	+/-	4.89E-02	1.13E+00	1.35E-04	+/-	7.69E-06
7	722.01	8.02E-02	+/-	5.02E-02	1.11E+00	1.06E-04	+/-	6.56E-06
8	778.90	3.45E-02	+/-	2.45E-02	1.11E+00	9.86E-05	+/-	6.05E-06
9	1112.12	2.59E-02	+/-	1.49E-02	1.09E+00	7.38E-05	+/-	3.43E-06
10	1333.40	1.12E-01	+/-	3.11E-02	1.08E+00	6.64E-05	+/-	4.06E-06
11	1408.01	1.73E-02	+/-	1.22E-02	1.08E+00	6.48E-05	+/-	4.76E-06
12	2236.00	1.00E+02	+/-	1.49E+00	1.06E+00	6.28E-05	+/-	1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85101368
Peak Locate Performed on: 8-28-07 6:54:14 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.59	0.1374	31.96	25.56
2	100.89	0.1820	50.11	9.57
3	121.06	0.0424	60.20	242.24
4	199.41	0.0670	99.37	88.33
5	224.05	0.1000	111.69	42.63
6	252.70	0.0581	125.96	123.48
7	260.69	0.0581	129.99	123.48
8	290.30	0.1935	144.82	13.27
9	299.27	0.1794	149.30	15.82
10	324.16	0.1893	161.74	8.68
11	344.84	0.2177	172.08	9.47
12	360.41	0.2246	179.87	8.43
13	380.55	0.2166	189.94	9.24
14	393.35	0.1925	196.34	11.23
15	409.06	0.0894	204.20	53.78
16	418.02	0.0734	208.67	78.85
17	512.72	0.1624	256.03	15.91
18	537.23	0.2686	268.28	5.66
19	596.94	0.1966	298.14	11.62
20	625.57	0.1405	312.45	19.82
21	643.26	0.2462	321.50	7.99
22	649.06	0.2056	324.11	10.23
23	667.43	0.0783	333.41	61.47
24	673.98	0.1340	336.41	26.54
25	691.98	0.0759	345.65	71.34
26	738.23	0.1230	368.78	19.51
27	752.01	0.0573	375.67	122.93
28	761.99	0.1021	380.81	43.01
29	767.80	0.1118	383.40	36.78
30	787.73	0.0751	393.53	64.76
31	829.35	0.0553	414.34	117.17
32	846.99	0.1133	423.16	31.13
33	904.78	0.0946	452.05	41.19
34	1023.53	0.1903	511.43	7.87
35	1118.69	0.2086	559.01	8.19
36	1239.60	0.2272	619.47	6.53

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	1293.49	0.2016	646.41	8.54
38	1306.66	0.2373	653.00	5.27
39	1319.80	0.1304	659.42	20.47
40	1326.69	0.1304	663.05	20.47
41	1438.80	0.1524	718.97	15.56
42	1445.90	0.1524	722.62	15.56
43	1540.49	0.2438	769.91	5.99
44	2667.16	0.2269	1333.24	5.75
45	4471.84	0.0266	2235.58	403.64

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85101368
Peak Analysis Performed on: 8-28-07 6:54:14 PM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	61-	67	64.59	31.96	2.24E+03	101.49	3.50E+03
	2	94-	105	100.89	50.11	4.05E+03	298.02	3.27E+04
	3	114-	127	121.06	60.20	1.17E+05	462.38	3.51E+04
	4	194-	203	199.41	99.37	1.78E+04	348.31	4.59E+04
	5	217-	227	224.05	111.69	5.45E+03	288.18	3.24E+04
M	6	250-	267	252.59	125.96	3.67E+03	120.55	1.44E+04
m	7	250-	267	260.65	129.99	3.12E+04	323.93	1.63E+04
	8	283-	293	290.30	144.82	6.65E+02	228.39	2.16E+04
	9	297-	302	299.27	149.30	1.03E+03	148.66	1.19E+04
	10	317-	328	324.16	161.74	1.12E+03	241.27	2.27E+04
	11	338-	351	344.84	172.08	1.61E+03	262.15	2.43E+04
	12	356-	364	360.41	179.87	6.46E+02	179.82	1.48E+04
	13	376-	383	380.55	189.94	7.77E+02	161.46	1.26E+04
	14	389-	400	393.35	196.34	1.14E+03	214.48	1.79E+04
	15	401-	413	409.06	204.20	1.83E+03	257.81	2.43E+04
	16	413-	425	418.02	208.67	5.63E+03	268.89	2.41E+04
	17	507-	520	512.72	256.03	1.57E+03	180.82	1.13E+04
	18	535-	544	537.23	268.28	3.49E+02	129.83	7.28E+03
	19	589-	600	596.94	298.14	4.95E+02	139.08	7.53E+03
	20	620-	629	625.57	312.45	1.41E+03	120.62	5.83E+03
M	21	640-	656	643.67	321.50	9.06E+02	84.08	4.88E+03
m	22	640-	656	648.89	324.11	1.24E+03	96.65	5.75E+03
M	23	662-	681	667.48	333.41	9.06E+03	170.27	4.99E+03
m	24	662-	681	673.49	336.41	2.57E+03	83.55	5.63E+03
	25	691-	699	691.98	345.65	8.45E+03	133.61	3.87E+03
	26	730-	745	738.23	368.78	2.79E+03	148.96	6.45E+03
	27	745-	759	752.01	375.67	1.76E+04	244.23	1.37E+04
M	28	759-	775	762.29	380.81	4.35E+03	104.63	2.61E+03
m	29	759-	775	767.47	383.40	4.11E+03	97.92	2.39E+03
	30	780-	795	787.73	393.53	9.06E+03	132.13	2.80E+03
	31	821-	837	829.35	414.34	2.47E+04	175.34	1.95E+03
	32	839-	852	846.99	423.16	1.37E+03	78.90	1.74E+03
	33	900-	912	904.78	452.05	2.96E+03	70.15	7.31E+02
	34	1015-	1031	1023.53	511.43	7.06E+02	50.26	5.82E+02
	35	1110-	1126	1118.69	559.01	1.69E+02	41.03	4.83E+02
	36	1231-	1247	1239.60	619.47	2.26E+02	41.48	4.78E+02
	37	1290-	1301	1293.49	646.41	7.28E+01	33.25	3.97E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	38	1301-	1314	1306.66	653.00	1.13E+02	35.14	4.01E+02
M	39	1314-	1334	1319.51	659.42	1.17E+02	17.51	3.05E+02
m	40	1314-	1334	1326.77	663.05	9.57E+02	52.63	2.52E+02
M	41	1434-	1451	1438.62	718.97	6.20E+01	13.02	1.77E+02
m	42	1434-	1451	1445.90	722.62	4.65E+02	38.60	1.69E+02
	43	1532-	1548	1540.49	769.91	1.68E+02	27.90	1.95E+02
	44	2662-	2674	2667.16	1333.24	8.29E+01	15.68	6.01E+01
	45	4461-	4482	4471.84	2235.58	1.82E+05	427.14	2.28E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85101368
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.988	2236.00*	100.00	7.701E+02	1.828E+02
Np-237	0.745	300.10	6.63		
		311.90*	38.60	3.622E+00	3.113E-01
Pu-239	0.971	413.70*	0.00	2.004E+06	4.011E+04
Pu-239A	0.966	129.29*	0.01	5.119E+05	1.354E+04
Am-241	0.972	662.42*	0.00	4.193E+05	2.342E+04
Am-241D	0.974	722.01*	0.00	4.454E+05	3.721E+04
Pu-241	0.963	148.57*	0.00	5.081E+05	7.370E+04

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-28-07 6:54:14 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
	1	31.96	1.9841E+01	4.53
	2	50.11	3.5816E+01	7.36
	3	60.20	1.0309E+03	0.47
	4	99.37	1.5778E+02	1.97
	5	111.69	4.8234E+01	5.29
M	6	125.96	3.2484E+01	3.29
	8	144.82	5.8768E+00	34.37
	10	161.74	9.9023E+00	21.55
	11	172.08	1.4202E+01	16.33
	12	179.87	5.7092E+00	27.85
	13	189.94	6.8743E+00	20.77
	14	196.34	1.0120E+01	18.74
	15	204.20	1.6189E+01	14.08
	16	208.67	4.9812E+01	4.78
	17	256.03	1.3866E+01	11.53
	18	268.28	3.0865E+00	37.20
	19	298.14	4.3750E+00	28.11
M	21	321.50	8.0128E+00	9.28
m	22	324.11	1.1001E+01	7.77
M	23	333.41	8.0099E+01	1.90
m	24	336.41	2.2766E+01	3.26
	25	345.65	7.4751E+01	1.60
	26	368.78	2.4708E+01	5.34
	27	375.67	1.5592E+02	1.41
M	28	380.81	3.8486E+01	2.42
m	29	383.40	3.6320E+01	2.40
	30	393.53	8.0160E+01	1.48
	32	423.16	1.2092E+01	5.78
	33	452.05	2.6175E+01	2.38
	34	511.43	6.2397E+00	7.13
	35	559.01	1.4928E+00	24.30
	36	619.47	2.0023E+00	18.32
	37	646.41	6.4377E-01	45.67
	38	653.00	9.9521E-01	31.22
M	39	659.42	1.0350E+00	14.96
M	41	718.97	5.4867E-01	20.99
	43	769.91	1.4840E+00	16.63
	44	1333.24	7.3344E-01	18.91

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.55E+02	+/-	1.26E+02		2.32E-02	+/-	3.42E-03
SE-75	<	3.47E-01	+/-	1.78E-02	<	9.41E-06	+/-	4.81E-07
EU-152x	<	2.70E-01	+/-	1.84E-02	<	7.33E-06	+/-	4.99E-07
U-233	<	1.68E+04	+/-	8.74E+02	<	4.54E-01	+/-	2.37E-02
U-235	<	4.40E-01	+/-	2.46E-02	<	1.19E-05	+/-	6.67E-07
Np-237		3.55E+00	+/-	3.87E-01		9.63E-05	+/-	1.05E-05
Pu-238	<	2.91E+04	+/-	1.45E+03	<	7.89E-01	+/-	3.92E-02
U-238		4.12E+00	+/-	1.83E+00		1.12E-04	+/-	4.95E-05
Pu-239		2.06E+06	+/-	6.69E+04		5.59E+01	+/-	1.81E+00
Pu-239A		5.43E+05	+/-	1.81E+04		1.47E+01	+/-	4.91E-01
Am-241		4.31E+05	+/-	2.63E+04		1.17E+01	+/-	7.12E-01
Am-241D		4.77E+05	+/-	3.66E+04		1.29E+01	+/-	9.93E-01
Pu-241		5.82E+05	+/-	1.06E+05		1.58E+01	+/-	2.86E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	5.05E-03	+/-	5.49E-04
U-238	1.23E+01	+/-	5.44E+00
Pu-239	3.32E+01	+/-	1.08E+00
Pu-239A	8.74E+00	+/-	2.92E-01
Am-241	1.26E-01	+/-	7.67E-03
Pu-241	5.63E-03	+/-	1.02E-03

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.70E+02	+/-	1.83E+02		2.09E-02	+/-	4.95E-03
SE-75	<	9.99E-01	+/-	9.45E-03	<	2.71E-05	+/-	2.56E-07
EU-152x	<	8.89E-01	+/-	1.66E-02	<	2.41E-05	+/-	4.50E-07
U-233	<	5.19E+04	+/-	1.15E+03	<	1.41E+00	+/-	3.11E-02
U-235	<	1.34E+00	+/-	3.10E-02	<	3.62E-05	+/-	8.41E-07
Np-237		3.62E+00	+/-	3.11E-01		9.82E-05	+/-	8.44E-06
Pu-238	<	9.47E+04	+/-	1.86E+03	<	2.57E+00	+/-	5.04E-02
U-238	<	2.33E+01	+/-	3.72E-01	<	6.31E-04	+/-	1.01E-05
Pu-239		2.00E+06	+/-	4.01E+04		5.43E+01	+/-	1.09E+00
Pu-239A		5.12E+05	+/-	1.35E+04		1.39E+01	+/-	3.67E-01
Am-241		4.19E+05	+/-	2.34E+04		1.14E+01	+/-	6.35E-01
Am-241D		4.45E+05	+/-	3.72E+04		1.21E+01	+/-	1.01E+00
Pu-241		5.08E+05	+/-	7.37E+04		1.38E+01	+/-	2.00E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	5.14E-03	+/-	4.42E-04
Pu-239	3.23E+01	+/-	6.46E-01
Pu-239A	8.24E+00	+/-	2.18E-01
Am-241	1.22E-01	+/-	6.84E-03
Pu-241	4.91E-03	+/-	7.13E-04

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.937	+/-	5.2111
Matrix Longitudinal Ratio:	0.926	+/-	2.3722
Source Vertical Ratio:	0.787	+/-	0.4365
Matrix Vertical Ratio:	0.790	+/-	0.0455

NUDS could not find the transmission peak in one radial segment.
NUDS could not find the source peak in one radial segment.

Radioassay Data Sheet
Procedure ID & Rev: WCP-55 03/07/2002

Thu Aug 30 11:09:52 2007
Software Version: GWAS v2.3bGEN

Drum ID	: LL85601657	Gross Weight (kg)	: 62.8
Sequence Number	: 2377	Fill Height (%)	: 100.0
Assay Date	: 08/21/07 13:46:43	Density (g/cc)	: 0.19
		Net Weight (kg)	: 38.95
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	1.06e-05	+/-	1.43e-06 Ci/g
Total Pu-239 Equiv Activity:	4.19e-01	+/-	5.58e-02 Ci
Total Pu-239 Fissile Gram Equiv:	4.57e+00	+/-	8.62e-01 g
Decay Heat:	1.31e-02	+/-	1.76e-03 W
Total Pu Mass:	4.86e+00	+/-	8.64e-01 g
TMU:	18.93%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	4.55e-02	4.19e+00
Pu-239	9.37e+01	1.51e-01
Pu-240	6.09e+00	2.30e+00
Pu-241	1.05e-01	2.88e+00
Pu-242	2.61e-02	1.10e+01
Am-241	2.73e-01	1.68e+00
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	2.21e-03	4.29e-04	3.78e-02	7.34e-03	4.60e-04
Pu-239	4.55e+00	8.62e-01	2.82e-01	5.35e-02	3.43e-02
Pu-240	2.96e-01	5.65e-02	6.72e-02	1.28e-02	0.00e+00
Pu-241	5.08e-03	9.74e-04	5.26e-01	1.01e-01	4.55e-04
Pu-242	1.27e-03	2.77e-04	4.97e-06	1.09e-06	0.00e+00
Am-241	7.32e-03	1.89e-03	2.51e-02	6.46e-03	2.93e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	6.06e-04	1.57e-04	4.27e-07	1.11e-07	1.65e-04
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	4.98e-02
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.91e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	4.76e-01
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature: Robert J. Hazlett Jr. — Date: 8-30-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85601657
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2377
Assayed on: 08/21/07 13:46:43
Report Generated: 08/30/07 11:09:37
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

Pu-240 Wt Pct <6.09> +/- 2 Sigma error <0.28>
is within limits
Pu-240 Wt Pct error <2.30> is within limits
Pu-238 Wt Pct error <4.19> is within limits
QFIT <1.01> is within limits
REVIEW MGAERR12: Calculations in MGAABS didn't converge: MGA results may be suspect OK

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.187> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.68e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.61> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <0.69> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <0.73> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <0.70> is acceptable in Segment 4
Pulser value <0.99> is within range in Segment 4
DEAD TIME percentage <0.70> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <0.68> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <0.76> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <0.91> is acceptable in Segment 8
Pulser value <0.99> is within range in Segment 8
DEAD TIME percentage <1.13> is acceptable in Segment 9
Pulser value <0.98> is within range in Segment 9
DEAD TIME percentage <0.93> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <0.77> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <0.97> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <1.22> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <1.06> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.82> is acceptable in Segment 15

Pulser value <0.99> is within range in Segment 15
DEAD TIME percentage <0.68> is acceptable in Segment 16
Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 5 OK
REVIEW Fiducial Transmission Line <400.645996> < <0.01> found in Segment 5 OK
Transmission results are acceptable in Segment 6
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

All energy peaks within <3.00e+00> RCHISQ limit

Section 7 - FGE MASS REVIEW

FGE Mass <5.43> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <621.73> is above lower limit <200.00> OK
Np-237 ratio <7516.85> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <4.55> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed OK. Checked.

Independent Reviewer: Robert J. Hackett Date: 8-30-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85601657
Item Description Code:
Sequence Number: 2377
Assayed on: 08/21/07 13:46:43
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA MGAERR12	OK
SECTION 5 - TRANSMISSION Low Transmission Line 136.0 less than 0.001 found in Segment 5 Fiducial Transmission Line less than 0.01 found in Segment 5	OK. Ratio 129/413 OK.
SECTION 9 - IDC COUNT TYPE IDC is not available.	N/A

Technical Reviewer: Robert J. Hazlitt Jr. Date: 8-30-07

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***********************************************************************
*****                      M G A   R E P O R T                    *****
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Report generated on: 8-21-07 2:43:15 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202377.CNF Sens : 30.0% LT: 55.5 Mins DT: 0.62
Measurement date: 8-21-07 Declared date: 8-21-07

Sample ID: LL85601657 Detector: Total counts: 6.671E+05

Pu g/cm2 = 0.2933 Cd g/cm2 = 1.5717 FWHM at 122 keV = 611 eV
QFIT = 1.01 FWHM at 208 keV = 777 eV
NQFIT = 1.00

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	Meas. date %Err	Decl. date % weight	Decl. date %Err
Pu-238	0.000485	4.2	4.1	0.4348	4.6	0.04549	4.19	0.04549	4.19
Pu-239	1.000000	0.0	1.2	895.7792	2.9	93.73098	0.15	93.73098	0.15
Pu-240	0.065003	2.5	2.3	58.2285	3.4	6.09281	2.30	6.09281	2.30
Pu-241	0.001116	2.9	2.6	1.0000	0.0	0.10464	2.88	0.10464	2.88
Pu-242	(New alg.	)		0.2492	(11)	0.02608	(11)	0.02608	(11)
Am-241	0.002917	1.7	1.4	2.6133	2.9	0.27345	1.68	0.27345	1.68

Pu-240 effective (meas. date) = 6.251 +/- 2.51%
Am-241 separated about 26.845 +/- 0.541 years ago
Am/Pu-241 weight ratio = 2.61331 +/- 2.98%

Messages :

Lead x-rays detected.
Calculations in MGAABS didn't converge : results may be suspect.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102377.S11
Sample ID: LL85601657 Count Sequence Number: 2377
Assay Start: 8-21-07 1:46:45 PM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 62800.0 g Net: 38950.0 g
Density: 0.187 g /ml

Container Type: 55 Gal Galv 23.8
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv 23.8
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 3:07:06 PM 78569

Reviewed by: Robert J. Hartlett Jr. Date: 8-30-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.30 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.368 +/- 0.0132
SE-75	264.65	0.000 +/- 0.0000	0.452 +/- 0.0126
SE-75	279.53	0.000 +/- 0.0000	0.460 +/- 0.0178
SE-75	400.65	0.000 +/- 0.0000	0.547 +/- 0.0295

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.12	9.44E-01 +/- 3.06E-01	1.62E+00	8.59E-07 +/- 2.49E-06
	2	60.21	1.31E+01 +/- 4.42E-01	1.56E+00	6.38E-06 +/- 1.17E-05
	3	99.39	8.81E-01 +/- 2.28E-01	1.47E+00	1.52E-04 +/- 4.17E-05
M	4	126.05	2.94E-01 +/- 7.67E-02	1.44E+00	2.88E-04 +/- 1.89E-05
m	5	130.14	1.40E+00 +/- 1.88E-01	1.43E+00	3.04E-04 +/- 2.21E-05
	6	148.57	7.63E-01 +/- 1.45E-01	1.42E+00	3.59E-04 +/- 4.14E-05
	7	204.20	1.11E-01 +/- 7.23E-02	1.37E+00	3.83E-04 +/- 4.70E-05
	8	375.78	1.83E-01 +/- 7.70E-02	1.26E+00	2.25E-04 +/- 1.40E-05
	9	393.57	9.60E-02 +/- 4.48E-02	1.25E+00	2.14E-04 +/- 1.43E-05
	10	413.70	3.20E-01 +/- 6.59E-02	1.24E+00	2.03E-04 +/- 1.44E-05
	11	1333.63	1.29E-01 +/- 3.34E-02	1.13E+00	7.29E-05 +/- 4.34E-06
	12	2236.00	1.00E+02 +/- 1.49E+00	1.10E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 114.21 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.194 +/- 0.0095
SE-75	264.65	0.000 +/- 0.0000	0.279 +/- 0.0092
SE-75	279.53	0.000 +/- 0.0000	0.291 +/- 0.0137
SE-75	400.65	0.000 +/- 0.0000	0.350 +/- 0.0239

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	60.20	2.48E+01 +/- 6.35E-01	1.99E+00	1.33E-04 +/- 2.14E-04
	2	99.25	8.28E-01 +/- 3.28E-01	1.82E+00	3.09E-04 +/- 7.55E-05
	3	104.22	8.87E-01 +/- 2.32E-01	1.81E+00	3.26E-04 +/- 5.88E-05
M	4	125.90	2.55E-01 +/- 8.47E-02	1.77E+00	3.82E-04 +/- 2.26E-05
m	5	130.06	2.80E+00 +/- 2.80E-01	1.76E+00	3.89E-04 +/- 2.53E-05
	6	208.75	5.15E-01 +/- 1.38E-01	1.63E+00	4.25E-04 +/- 4.48E-05
	7	311.90	1.01E-01 +/- 6.03E-02	1.51E+00	3.58E-04 +/- 1.69E-05
	8	333.37	1.78E-01 +/- 7.04E-02	1.50E+00	3.42E-04 +/- 1.64E-05
	9	345.70	2.75E-01 +/- 7.93E-02	1.49E+00	3.34E-04 +/- 1.66E-05
	10	375.60	4.80E-01 +/- 1.09E-01	1.47E+00	3.13E-04 +/- 1.75E-05
	11	393.62	1.74E-01 +/- 5.24E-02	1.46E+00	3.01E-04 +/- 1.81E-05
	12	413.70	5.81E-01 +/- 7.64E-02	1.44E+00	2.89E-04 +/- 1.85E-05
	13	1001.03	8.63E-03 +/- 8.63E-03	1.27E+00	1.28E-04 +/- 5.83E-06
	14	1085.91	3.45E-02 +/- 1.73E-02	1.26E+00	1.20E-04 +/- 5.31E-06
	15	2236.00	1.00E+02 +/- 1.49E+00	1.18E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 114.16 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.094 +/- 0.0065
SE-75	264.65	0.000 +/- 0.0000	0.170 +/- 0.0069
SE-75	279.53	0.000 +/- 0.0000	0.168 +/- 0.0103
SE-75	400.65	0.000 +/- 0.0000	0.200 +/- 0.0187

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	50.24	1.29E+00 +/- 3.46E-01	2.71E+00	3.96E-05 +/- 1.91E-05
2	60.22	3.03E+01 +/- 7.09E-01	2.54E+00	8.10E-05 +/- 2.79E-05
3	99.45	1.90E+00 +/- 3.30E-01	2.26E+00	2.97E-04 +/- 3.03E-05
4	111.80	7.45E-01 +/- 2.29E-01	2.22E+00	3.55E-04 +/- 2.60E-05
5	129.29	3.01E+00 +/- 2.64E-01	2.17E+00	4.18E-04 +/- 2.23E-05
6	148.57	4.24E-01 +/- 2.02E-01	2.11E+00	4.63E-04 +/- 2.25E-05
7	204.30	1.95E-01 +/- 9.58E-02	1.95E+00	4.93E-04 +/- 2.59E-05
8	208.71	7.37E-01 +/- 1.91E-01	1.94E+00	4.92E-04 +/- 2.59E-05
9	333.40	2.47E-01 +/- 8.86E-02	1.78E+00	3.84E-04 +/- 1.63E-05
10	345.76	4.12E-01 +/- 8.79E-02	1.77E+00	3.72E-04 +/- 1.56E-05
11	375.67	8.07E-01 +/- 1.05E-01	1.75E+00	3.46E-04 +/- 1.41E-05
12	393.58	2.98E-01 +/- 7.33E-02	1.74E+00	3.31E-04 +/- 1.34E-05
13	413.70	7.41E-01 +/- 9.85E-02	1.72E+00	3.16E-04 +/- 1.28E-05
14	778.90	3.02E-02 +/- 1.90E-02	1.50E+00	1.66E-04 +/- 8.11E-06
15	1408.01	1.73E-02 +/- 1.22E-02	1.35E+00	1.15E-04 +/- 7.14E-06
16	2236.00	1.00E+02 +/- 1.49E+00	1.28E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 114.20 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.059 +/- 0.0058
SE-75	264.65	0.000 +/- 0.0000	0.111 +/- 0.0055
SE-75	279.53	0.000 +/- 0.0000	0.114 +/- 0.0086
SE-75	400.65	0.000 +/- 0.0000	0.147 +/- 0.0167

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	50.08	1.55E+00 +/- 4.07E-01	3.15E+00	1.06E-05 +/- 2.66E-05
2	60.22	2.47E+01 +/- 6.43E-01	2.92E+00	3.64E-05 +/- 5.78E-05
3	99.33	1.38E+00 +/- 3.04E-01	2.57E+00	2.64E-04 +/- 6.35E-05
4	111.63	5.65E-01 +/- 2.00E-01	2.52E+00	3.34E-04 +/- 3.63E-05
M 5	125.89	3.80E-01 +/- 9.14E-02	2.47E+00	3.99E-04 +/- 2.37E-05

m	6	130.08	2.74E+00	+/-	2.75E-01	2.45E+00	4.15E-04	+/- 2.69E-05
	7	148.57	5.76E-01	+/-	1.96E-01	2.39E+00	4.63E-04	+/- 4.66E-05
	8	204.16	2.82E-01	+/-	9.64E-02	2.21E+00	4.83E-04	+/- 5.22E-05
	9	208.80	3.06E-01	+/-	1.72E-01	2.20E+00	4.80E-04	+/- 5.04E-05
	10	311.90	1.35E-01	+/-	6.93E-02	2.00E+00	3.77E-04	+/- 1.75E-05
	11	333.66	2.27E-01	+/-	9.80E-02	1.97E+00	3.57E-04	+/- 1.65E-05
	12	345.68	3.80E-01	+/-	8.98E-02	1.96E+00	3.46E-04	+/- 1.65E-05
	13	375.64	6.94E-01	+/-	9.97E-02	1.92E+00	3.21E-04	+/- 1.71E-05
	14	393.44	2.25E-01	+/-	6.14E-02	1.91E+00	3.08E-04	+/- 1.75E-05
	15	413.70	6.01E-01	+/-	8.66E-02	1.88E+00	2.94E-04	+/- 1.78E-05
	16	443.98	4.80E-02	+/-	3.55E-02	1.85E+00	2.75E-04	+/- 1.78E-05
	17	722.01	8.10E-02	+/-	3.23E-02	1.64E+00	1.77E-04	+/- 9.59E-06
	18	1408.01	4.32E-02	+/-	1.93E-02	1.42E+00	1.06E-04	+/- 7.05E-06
	19	2236.00	1.00E+02	+/-	1.50E+00	1.34E+00	7.00E-05	+/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 114.20 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.039 +/- 0.0032
SE-75	279.53	0.000 +/- 0.0000	0.035 +/- 0.0055
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.22	1.63E+01 +/- 5.10E-01	3.84E+00	4.82E-05 +/- 8.25E-05
2	95.31	4.70E-01 +/- 2.66E-01	3.35E+00	2.54E-04 +/- 8.20E-05
3	104.12	7.20E-01 +/- 2.30E-01	3.29E+00	3.04E-04 +/- 5.78E-05
4	111.67	5.20E-01 +/- 1.73E-01	3.24E+00	3.41E-04 +/- 3.83E-05
5	129.29	2.25E+00 +/- 2.12E-01	3.15E+00	4.07E-04 +/- 2.65E-05
6	204.27	2.09E-01 +/- 1.45E-01	2.87E+00	4.58E-04 +/- 5.30E-05
7	208.81	2.20E-01 +/- 1.50E-01	2.86E+00	4.55E-04 +/- 5.11E-05
8	279.54	1.81E-01 +/- 9.94E-02	2.76E+00	3.92E-04 +/- 2.28E-05
9	311.90	1.08E-01 +/- 6.76E-02	2.68E+00	3.62E-04 +/- 1.74E-05
10	345.70	1.28E-01 +/- 7.92E-02	2.60E+00	3.33E-04 +/- 1.69E-05
11	375.69	4.14E-01 +/- 1.16E-01	2.53E+00	3.11E-04 +/- 1.79E-05
12	413.70	5.00E-01 +/- 7.33E-02	2.46E+00	2.86E-04 +/- 1.90E-05
13	443.98	8.28E-02 +/- 4.32E-02	2.40E+00	2.69E-04 +/- 1.92E-05

14	778.90	5.97E-02	+/-	3.21E-02	1.99E+00	1.66E-04	+/- 8.62E-06
15	1408.01	3.45E-02	+/-	1.73E-02	1.68E+00	1.00E-04	+/- 6.78E-06
16	2236.00	1.00E+02	+/-	1.49E+00	1.54E+00	5.76E-05	+/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 114.22 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.078 +/- 0.0062
SE-75	264.65	0.000 +/- 0.0000	0.114 +/- 0.0054
SE-75	279.53	0.000 +/- 0.0000	0.123 +/- 0.0089
SE-75	400.65	0.000 +/- 0.0000	0.158 +/- 0.0173

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.20	1.12E+01 +/- 4.45E-01	2.69E+00	6.10E-05 +/- 9.95E-05
2	99.34	1.44E+00 +/- 3.15E-01	2.38E+00	3.06E-04 +/- 7.50E-05
3	111.83	5.25E-01 +/- 2.30E-01	2.33E+00	3.69E-04 +/- 3.96E-05
4	129.29	2.59E+00 +/- 2.31E-01	2.28E+00	4.31E-04 +/- 2.73E-05
5	204.38	1.81E-01 +/- 1.15E-01	2.13E+00	4.75E-04 +/- 5.26E-05
6	208.76	4.35E-01 +/- 1.67E-01	2.13E+00	4.72E-04 +/- 5.09E-05
7	264.66	2.34E-01 +/- 1.07E-01	2.04E+00	4.25E-04 +/- 2.79E-05
8	333.43	2.71E-01 +/- 1.02E-01	1.93E+00	3.65E-04 +/- 1.73E-05
9	345.86	3.16E-01 +/- 7.81E-02	1.92E+00	3.55E-04 +/- 1.74E-05
10	375.68	5.39E-01 +/- 9.60E-02	1.89E+00	3.34E-04 +/- 1.84E-05
11	393.63	2.76E-01 +/- 6.58E-02	1.87E+00	3.22E-04 +/- 1.90E-05
12	413.70	6.23E-01 +/- 9.01E-02	1.85E+00	3.09E-04 +/- 1.95E-05
13	1085.91	1.73E-02 +/- 1.22E-02	1.47E+00	1.34E-04 +/- 5.68E-06
14	1112.12	2.23E-02 +/- 1.73E-02	1.47E+00	1.31E-04 +/- 5.52E-06
15	2236.00	1.00E+02 +/- 1.50E+00	1.33E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 114.13 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.314 +/- 0.0125
SE-75	264.65	0.000 +/- 0.0000	0.422 +/- 0.0122
SE-75	279.53	0.000 +/- 0.0000	0.428 +/- 0.0169
SE-75	400.65	0.000 +/- 0.0000	0.485 +/- 0.0297

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.83	2.03E-01 +/- 7.80E-02	2.10E+00	4.35E-09 +/- 2.52E-08
2	60.21	2.37E+01 +/- 6.35E-01	1.66E+00	1.61E-05 +/- 2.40E-05
3	95.33	5.82E-01 +/- 3.21E-01	1.55E+00	2.12E-04 +/- 6.03E-05
4	99.39	1.34E+00 +/- 4.53E-01	1.55E+00	2.43E-04 +/- 5.52E-05
5	104.44	1.15E+00 +/- 2.93E-01	1.54E+00	2.82E-04 +/- 4.72E-05
6	111.85	8.21E-01 +/- 2.66E-01	1.53E+00	3.36E-04 +/- 3.46E-05
7	129.29	4.61E+00 +/- 3.12E-01	1.51E+00	4.41E-04 +/- 2.71E-05
8	148.57	6.12E-01 +/- 2.34E-01	1.49E+00	5.16E-04 +/- 4.85E-05
9	204.15	4.65E-01 +/- 1.49E-01	1.42E+00	5.51E-04 +/- 5.51E-05
10	208.71	4.05E-01 +/- 1.81E-01	1.42E+00	5.47E-04 +/- 5.32E-05
11	244.70	1.53E-01 +/- 1.08E-01	1.38E+00	5.05E-04 +/- 3.65E-05
12	311.90	1.27E-01 +/- 7.85E-02	1.34E+00	4.17E-04 +/- 1.86E-05
13	333.41	3.41E-01 +/- 1.11E-01	1.33E+00	3.91E-04 +/- 1.76E-05
14	345.55	2.93E-01 +/- 1.05E-01	1.32E+00	3.78E-04 +/- 1.76E-05
15	375.69	1.14E+00 +/- 1.25E-01	1.31E+00	3.48E-04 +/- 1.82E-05
16	380.59	2.03E-01 +/- 9.69E-02	1.31E+00	3.44E-04 +/- 1.83E-05
17	393.69	4.85E-01 +/- 7.77E-02	1.30E+00	3.33E-04 +/- 1.86E-05
18	413.70	1.19E+00 +/- 1.17E-01	1.30E+00	3.17E-04 +/- 1.88E-05
19	452.17	1.40E-01 +/- 5.62E-02	1.28E+00	2.90E-04 +/- 1.86E-05
20	609.24	5.09E-02 +/- 3.50E-02	1.24E+00	2.19E-04 +/- 1.36E-05
21	964.13	4.03E-02 +/- 2.48E-02	1.18E+00	1.49E-04 +/- 6.59E-06
22	2236.00	1.00E+02 +/- 1.49E+00	1.12E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 113.95 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.384 +/- 0.0139
SE-75	264.65	0.000 +/- 0.0000	0.486 +/- 0.0135
SE-75	279.53	0.000 +/- 0.0000	0.494 +/- 0.0191
SE-75	400.65	0.000 +/- 0.0000	0.568 +/- 0.0319

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.40	2.76E+00 +/- 4.62E-01	1.59E+00	6.10E-05 +/- 2.97E-05
	2	60.21	5.09E+01 +/- 1.00E+00	1.53E+00	1.10E-04 +/- 3.84E-05
	3	104.32	3.45E+00 +/- 3.55E-01	1.44E+00	3.46E-04 +/- 3.06E-05
	4	111.71	7.51E-01 +/- 3.54E-01	1.43E+00	3.75E-04 +/- 2.72E-05
	5	116.04	8.04E-01 +/- 3.78E-01	1.42E+00	3.90E-04 +/- 2.56E-05
M	6	126.03	5.74E-01 +/- 1.18E-01	1.41E+00	4.19E-04 +/- 2.31E-05
m	7	130.02	8.48E+00 +/- 4.64E-01	1.41E+00	4.29E-04 +/- 2.26E-05
	8	204.17	3.84E-01 +/- 1.94E-01	1.34E+00	4.76E-04 +/- 2.61E-05
	9	208.66	1.10E+00 +/- 2.56E-01	1.34E+00	4.74E-04 +/- 2.60E-05
	10	311.90	1.51E-01 +/- 1.07E-01	1.27E+00	3.88E-04 +/- 1.78E-05
	11	333.54	6.50E-01 +/- 1.27E-01	1.26E+00	3.69E-04 +/- 1.62E-05
	12	345.68	7.47E-01 +/- 1.18E-01	1.26E+00	3.59E-04 +/- 1.54E-05
	13	369.02	3.51E-01 +/- 1.03E-01	1.24E+00	3.39E-04 +/- 1.41E-05
	14	375.75	1.35E+00 +/- 2.18E-01	1.24E+00	3.34E-04 +/- 1.38E-05
M	15	380.90	5.31E-01 +/- 1.03E-01	1.24E+00	3.30E-04 +/- 1.36E-05
m	16	383.43	3.05E-01 +/- 7.19E-02	1.24E+00	3.28E-04 +/- 1.35E-05
	17	393.56	7.98E-01 +/- 9.64E-02	1.23E+00	3.21E-04 +/- 1.31E-05
	18	413.70	1.95E+00 +/- 1.42E-01	1.23E+00	3.06E-04 +/- 1.25E-05
	19	452.22	2.80E-01 +/- 6.26E-02	1.22E+00	2.82E-04 +/- 1.16E-05
	20	778.90	1.74E-02 +/- 1.23E-02	1.16E+00	1.66E-04 +/- 8.00E-06
	21	1173.59	8.78E-02 +/- 3.29E-02	1.13E+00	1.22E-04 +/- 4.63E-06
	22	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	1.19E-04 +/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 113.70 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.272 +/- 0.0114
SE-75	264.65	0.000 +/- 0.0000	0.413 +/- 0.0120
SE-75	279.53	0.000 +/- 0.0000	0.382 +/- 0.0169
SE-75	400.65	0.000 +/- 0.0000	0.519 +/- 0.0294

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.23	2.97E+00 +/- 5.56E-01	1.84E+00	3.20E-06 +/- 7.84E-06
	2	60.21	8.71E+01 +/- 1.47E+00	1.76E+00	1.66E-05 +/- 2.59E-05
	3	99.32	5.75E+00 +/- 6.13E-01	1.63E+00	2.35E-04 +/- 5.58E-05
	4	111.71	2.29E+00 +/- 3.75E-01	1.60E+00	3.22E-04 +/- 3.46E-05
M	5	125.95	1.06E+00 +/- 1.45E-01	1.59E+00	4.05E-04 +/- 2.41E-05
m	6	130.01	1.19E+01 +/- 5.51E-01	1.58E+00	4.24E-04 +/- 2.73E-05
	7	148.57	3.59E-01 +/- 2.20E-01	1.55E+00	4.88E-04 +/- 4.79E-05
	8	161.70	3.09E-01 +/- 2.10E-01	1.52E+00	5.12E-04 +/- 5.68E-05
	9	172.18	7.07E-01 +/- 2.28E-01	1.50E+00	5.22E-04 +/- 5.97E-05
	10	208.73	2.07E+00 +/- 2.54E-01	1.45E+00	5.11E-04 +/- 5.15E-05
M	11	333.49	1.20E+00 +/- 1.69E-01	1.34E+00	3.59E-04 +/- 1.71E-05
m	12	337.08	2.93E-01 +/- 7.11E-02	1.34E+00	3.55E-04 +/- 1.71E-05
M	13	342.04	1.41E-01 +/- 5.70E-02	1.33E+00	3.50E-04 +/- 1.71E-05
m	14	345.65	1.13E+00 +/- 1.64E-01	1.33E+00	3.46E-04 +/- 1.72E-05
	15	368.80	3.48E-01 +/- 1.10E-01	1.30E+00	3.24E-04 +/- 1.76E-05
	16	375.71	1.94E+00 +/- 2.32E-01	1.29E+00	3.18E-04 +/- 1.78E-05
M	17	380.97	5.35E-01 +/- 1.02E-01	1.29E+00	3.14E-04 +/- 1.79E-05
m	18	383.18	5.22E-01 +/- 9.86E-02	1.29E+00	3.12E-04 +/- 1.80E-05
	19	393.56	9.70E-01 +/- 1.29E-01	1.28E+00	3.03E-04 +/- 1.81E-05
	20	413.70	2.74E+00 +/- 1.72E-01	1.27E+00	2.88E-04 +/- 1.83E-05
	21	423.18	1.42E-01 +/- 7.14E-02	1.26E+00	2.82E-04 +/- 1.83E-05
	22	452.16	3.72E-01 +/- 7.10E-02	1.25E+00	2.63E-04 +/- 1.81E-05
	23	662.42	4.86E-02 +/- 3.12E-02	1.21E+00	1.84E-04 +/- 1.12E-05
	24	1085.91	8.66E-03 +/- 1.95E-02	1.16E+00	1.27E-04 +/- 5.58E-06
	25	1112.12	3.46E-02 +/- 1.73E-02	1.15E+00	1.25E-04 +/- 5.44E-06
	26	1174.42	6.06E-02 +/- 2.29E-02	1.15E+00	1.21E-04 +/- 5.16E-06
	27	1408.01	8.66E-03 +/- 8.66E-03	1.13E+00	1.05E-04 +/- 6.90E-06
	28	2223.98	5.79E-02 +/- 2.73E-02	1.11E+00	6.17E-05 +/- 3.28E-05
	29	2236.00	1.00E+02 +/- 1.50E+00	1.11E+00	6.12E-05 +/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 113.93 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.325 +/- 0.0129
SE-75	264.65	0.000 +/- 0.0000	0.452 +/- 0.0127
SE-75	279.53	0.000 +/- 0.0000	0.465 +/- 0.0182
SE-75	400.65	0.000 +/- 0.0000	0.516 +/- 0.0309

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.70	3.74E-01 +/- 1.20E-01	2.07E+00	1.59E-05 +/- 1.60E-05
	2	49.86	1.64E+00 +/- 5.79E-01	1.71E+00	8.32E-05 +/- 4.20E-05
	3	60.21	5.69E+01 +/- 1.10E+00	1.64E+00	1.38E-04 +/- 4.88E-05
	4	99.34	4.55E+00 +/- 4.62E-01	1.53E+00	3.30E-04 +/- 3.40E-05
	5	111.81	6.65E-01 +/- 3.45E-01	1.51E+00	3.72E-04 +/- 2.73E-05
	6	116.04	6.18E-01 +/- 3.66E-01	1.51E+00	3.84E-04 +/- 2.55E-05
M	7	126.02	1.15E+00 +/- 1.38E-01	1.50E+00	4.08E-04 +/- 2.27E-05
m	8	130.02	6.96E+00 +/- 4.25E-01	1.49E+00	4.16E-04 +/- 2.21E-05
M	9	145.26	3.83E-01 +/- 1.27E-01	1.47E+00	4.40E-04 +/- 2.19E-05
m	10	149.23	3.74E-01 +/- 1.26E-01	1.47E+00	4.44E-04 +/- 2.22E-05
	11	204.24	5.19E-01 +/- 2.30E-01	1.39E+00	4.57E-04 +/- 2.52E-05
	12	208.77	7.23E-01 +/- 2.23E-01	1.39E+00	4.56E-04 +/- 2.51E-05
	13	255.39	2.70E-01 +/- 1.11E-01	1.34E+00	4.29E-04 +/- 2.23E-05
M	14	333.45	8.88E-01 +/- 1.43E-01	1.30E+00	3.71E-04 +/- 1.62E-05
m	15	336.46	2.82E-01 +/- 7.15E-02	1.30E+00	3.68E-04 +/- 1.60E-05
	16	345.68	7.25E-01 +/- 1.24E-01	1.29E+00	3.62E-04 +/- 1.54E-05
	17	375.66	1.11E+00 +/- 1.88E-01	1.28E+00	3.40E-04 +/- 1.40E-05
M	18	380.96	3.43E-01 +/- 8.49E-02	1.28E+00	3.37E-04 +/- 1.38E-05
m	19	383.49	2.63E-01 +/- 6.97E-02	1.28E+00	3.35E-04 +/- 1.37E-05
	20	393.50	5.60E-01 +/- 8.97E-02	1.27E+00	3.28E-04 +/- 1.34E-05
	21	413.70	1.68E+00 +/- 1.35E-01	1.27E+00	3.15E-04 +/- 1.29E-05
	22	423.23	1.24E-01 +/- 5.28E-02	1.27E+00	3.09E-04 +/- 1.27E-05
	23	452.21	1.32E-01 +/- 4.73E-02	1.26E+00	2.92E-04 +/- 1.22E-05
	24	662.42	3.87E-02 +/- 2.56E-02	1.21E+00	2.06E-04 +/- 1.03E-05
	25	964.13	5.21E-02 +/- 2.13E-02	1.17E+00	1.45E-04 +/- 6.11E-06
	26	1112.12	3.47E-02 +/- 1.74E-02	1.15E+00	1.29E-04 +/- 4.78E-06
	27	2236.00	1.00E+02 +/- 1.50E+00	1.11E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 114.12 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.189 +/- 0.0099
SE-75	264.65	0.000 +/- 0.0000	0.296 +/- 0.0096
SE-75	279.53	0.000 +/- 0.0000	0.314 +/- 0.0143
SE-75	400.65	0.000 +/- 0.0000	0.318 +/- 0.0232

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.68	5.33E-01 +/- 1.10E-01	2.73E+00	1.37E-03 +/- 9.03E-03
2	50.30	1.08E+00 +/- 3.69E-01	2.12E+00	5.96E-04 +/- 1.57E-03
3	60.20	2.21E+01 +/- 6.30E-01	2.01E+00	5.03E-04 +/- 8.45E-04
4	99.31	2.02E+00 +/- 3.82E-01	1.83E+00	4.09E-04 +/- 1.03E-04
5	129.29	2.89E+00 +/- 2.51E-01	1.77E+00	3.99E-04 +/- 2.58E-05
6	208.76	5.89E-01 +/- 1.67E-01	1.62E+00	3.88E-04 +/- 4.33E-05
7	311.90	1.59E-01 +/- 1.02E-01	1.50E+00	3.53E-04 +/- 1.69E-05
8	333.51	5.10E-01 +/- 1.10E-01	1.50E+00	3.43E-04 +/- 1.63E-05
9	345.81	4.20E-01 +/- 8.66E-02	1.50E+00	3.38E-04 +/- 1.66E-05
10	375.69	1.02E+00 +/- 1.72E-01	1.50E+00	3.25E-04 +/- 1.79E-05
M 11	380.93	2.13E-01 +/- 8.15E-02	1.50E+00	3.23E-04 +/- 1.81E-05
m 12	383.51	1.31E-01 +/- 5.47E-02	1.50E+00	3.21E-04 +/- 1.83E-05
13	393.40	2.92E-01 +/- 8.46E-02	1.50E+00	3.17E-04 +/- 1.87E-05
14	413.70	1.10E+00 +/- 1.04E-01	1.49E+00	3.08E-04 +/- 1.94E-05
15	558.70	5.36E-02 +/- 3.34E-02	1.42E+00	2.49E-04 +/- 1.74E-05
16	722.01	5.80E-02 +/- 2.71E-02	1.36E+00	1.97E-04 +/- 1.08E-05
17	1001.03	3.46E-02 +/- 1.73E-02	1.29E+00	1.39E-04 +/- 6.19E-06
18	1085.91	8.64E-03 +/- 8.64E-03	1.28E+00	1.27E-04 +/- 5.57E-06
19	1408.01	8.64E-03 +/- 8.64E-03	1.24E+00	9.35E-05 +/- 6.52E-06
20	2236.00	1.00E+02 +/- 1.49E+00	1.20E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.89 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.211 +/- 0.0106
SE-75	264.65	0.000 +/- 0.0000	0.319 +/- 0.0104
SE-75	279.53	0.000 +/- 0.0000	0.311 +/- 0.0149
SE-75	400.65	0.000 +/- 0.0000	0.409 +/- 0.0283

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.06	8.38E-01 +/- 1.48E-01	2.56E+00	2.40E-09 +/- 1.47E-08
2	60.22	3.35E+01 +/- 7.90E-01	1.93E+00	1.31E-05 +/- 2.09E-05
3	99.42	6.02E+00 +/- 4.70E-01	1.77E+00	2.33E-04 +/- 5.60E-05
4	111.68	1.13E+00 +/- 3.52E-01	1.74E+00	3.26E-04 +/- 3.52E-05
5	116.29	7.90E-01 +/- 4.74E-01	1.73E+00	3.57E-04 +/- 2.81E-05
6	129.29	5.33E+00 +/- 4.43E-01	1.71E+00	4.34E-04 +/- 2.74E-05
7	208.72	2.05E+00 +/- 2.54E-01	1.57E+00	5.31E-04 +/- 5.52E-05
8	298.21	2.86E-01 +/- 1.61E-01	1.48E+00	4.06E-04 +/- 1.97E-05
9	311.90	3.13E-01 +/- 1.02E-01	1.47E+00	3.88E-04 +/- 1.81E-05
M 10	333.36	1.25E+00 +/- 1.72E-01	1.44E+00	3.62E-04 +/- 1.72E-05
m 11	336.55	4.59E-01 +/- 9.09E-02	1.44E+00	3.59E-04 +/- 1.72E-05
12	345.74	1.04E+00 +/- 1.45E-01	1.43E+00	3.49E-04 +/- 1.72E-05
13	375.69	2.87E+00 +/- 2.55E-01	1.40E+00	3.19E-04 +/- 1.78E-05
M 14	380.93	5.17E-01 +/- 1.03E-01	1.40E+00	3.14E-04 +/- 1.80E-05
m 15	383.43	6.78E-01 +/- 1.19E-01	1.39E+00	3.12E-04 +/- 1.80E-05
16	393.68	1.12E+00 +/- 1.30E-01	1.38E+00	3.03E-04 +/- 1.82E-05
17	413.70	3.46E+00 +/- 1.87E-01	1.37E+00	2.87E-04 +/- 1.84E-05
18	423.41	3.05E-01 +/- 7.67E-02	1.37E+00	2.80E-04 +/- 1.84E-05
19	452.07	4.81E-01 +/- 7.65E-02	1.36E+00	2.62E-04 +/- 1.82E-05
20	662.42	1.17E-01 +/- 5.89E-02	1.29E+00	1.82E-04 +/- 1.13E-05
21	722.01	8.43E-02 +/- 4.32E-02	1.27E+00	1.70E-04 +/- 9.57E-06
22	2224.40	8.66E-02 +/- 2.74E-02	1.15E+00	6.54E-05 +/- 3.50E-05
23	2236.00	1.00E+02 +/- 1.50E+00	1.15E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.60 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.372 +/- 0.0136
SE-75	264.65	0.000 +/- 0.0000	0.482 +/- 0.0135
SE-75	279.53	0.000 +/- 0.0000	0.472 +/- 0.0195
SE-75	400.65	0.000 +/- 0.0000	0.530 +/- 0.0316

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.99	6.32E-01 +/- 1.88E-01	1.91E+00	1.69E-08 +/- 1.10E-07
2	60.21	5.50E+01 +/- 1.09E+00	1.55E+00	2.30E-05 +/- 3.89E-05
3	95.35	8.03E-01 +/- 5.09E-01	1.46E+00	2.22E-04 +/- 7.05E-05
4	104.28	7.50E+00 +/- 5.26E-01	1.45E+00	2.83E-04 +/- 5.27E-05
5	111.71	2.19E+00 +/- 4.70E-01	1.44E+00	3.29E-04 +/- 3.66E-05
6	116.64	8.06E-01 +/- 5.53E-01	1.44E+00	3.57E-04 +/- 2.79E-05
7	129.29	8.51E+00 +/- 4.18E-01	1.43E+00	4.16E-04 +/- 2.70E-05
8	204.15	1.92E+00 +/- 2.28E-01	1.35E+00	4.91E-04 +/- 5.54E-05
9	208.70	1.11E+00 +/- 3.57E-01	1.35E+00	4.88E-04 +/- 5.34E-05
10	311.90	4.02E-01 +/- 1.46E-01	1.30E+00	3.74E-04 +/- 1.79E-05
M 11	333.35	2.17E+00 +/- 2.51E-01	1.29E+00	3.53E-04 +/- 1.73E-05
m 12	336.53	3.55E-01 +/- 9.65E-02	1.29E+00	3.50E-04 +/- 1.73E-05
M 13	342.13	4.31E-01 +/- 8.57E-02	1.28E+00	3.45E-04 +/- 1.74E-05
m 14	345.68	2.06E+00 +/- 2.31E-01	1.28E+00	3.41E-04 +/- 1.75E-05
15	368.78	7.25E-01 +/- 1.77E-01	1.27E+00	3.22E-04 +/- 1.83E-05
16	375.69	4.64E+00 +/- 3.39E-01	1.27E+00	3.16E-04 +/- 1.85E-05
M 17	380.98	1.10E+00 +/- 1.50E-01	1.27E+00	3.12E-04 +/- 1.87E-05
m 18	383.50	9.76E-01 +/- 1.33E-01	1.27E+00	3.10E-04 +/- 1.88E-05
19	393.61	2.19E+00 +/- 1.76E-01	1.26E+00	3.03E-04 +/- 1.90E-05
20	413.70	5.64E+00 +/- 2.42E-01	1.26E+00	2.89E-04 +/- 1.94E-05
21	423.62	2.78E-01 +/- 7.98E-02	1.25E+00	2.83E-04 +/- 1.95E-05
22	452.09	9.00E-01 +/- 1.06E-01	1.25E+00	2.67E-04 +/- 1.94E-05
23	662.42	2.64E-01 +/- 5.92E-02	1.20E+00	1.92E-04 +/- 1.21E-05
24	722.01	5.33E-02 +/- 3.64E-02	1.19E+00	1.80E-04 +/- 1.01E-05
25	2236.00	1.00E+02 +/- 1.50E+00	1.11E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 113.78 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.290 +/- 0.0123
SE-75	264.65	0.000 +/- 0.0000	0.416 +/- 0.0122
SE-75	279.53	0.000 +/- 0.0000	0.393 +/- 0.0164
SE-75	400.65	0.000 +/- 0.0000	0.474 +/- 0.0298

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.11	4.08E-01 +/- 1.24E-01	2.19E+00	3.54E-06 +/- 2.12E-05
	2	50.10	1.13E+00 +/- 4.36E-01	1.79E+00	4.65E-05 +/- 1.15E-04
	3	60.21	5.54E+01 +/- 1.09E+00	1.71E+00	9.61E-05 +/- 1.50E-04
	4	104.29	4.94E+00 +/- 4.48E-01	1.58E+00	3.41E-04 +/- 5.96E-05
	5	111.71	1.97E+00 +/- 3.72E-01	1.57E+00	3.69E-04 +/- 3.92E-05
M	6	126.06	8.48E-01 +/- 1.35E-01	1.55E+00	4.12E-04 +/- 2.40E-05
m	7	130.03	7.68E+00 +/- 4.57E-01	1.55E+00	4.22E-04 +/- 2.68E-05
	8	171.99	5.26E-01 +/- 2.67E-01	1.48E+00	4.64E-04 +/- 5.40E-05
	9	204.22	1.09E+00 +/- 2.45E-01	1.44E+00	4.57E-04 +/- 4.85E-05
	10	208.68	5.34E-01 +/- 3.49E-01	1.43E+00	4.54E-04 +/- 4.70E-05
M	11	333.42	1.42E+00 +/- 1.81E-01	1.36E+00	3.54E-04 +/- 1.64E-05
m	12	336.19	4.47E-01 +/- 8.40E-02	1.35E+00	3.51E-04 +/- 1.64E-05
	13	345.62	1.11E+00 +/- 1.43E-01	1.35E+00	3.44E-04 +/- 1.65E-05
	14	368.74	3.45E-01 +/- 1.59E-01	1.33E+00	3.27E-04 +/- 1.70E-05
	15	375.71	2.66E+00 +/- 2.72E-01	1.33E+00	3.22E-04 +/- 1.72E-05
M	16	380.79	6.67E-01 +/- 1.16E-01	1.32E+00	3.19E-04 +/- 1.74E-05
m	17	383.51	6.21E-01 +/- 1.07E-01	1.32E+00	3.17E-04 +/- 1.74E-05
	18	393.70	1.36E+00 +/- 1.40E-01	1.31E+00	3.10E-04 +/- 1.77E-05
	19	413.70	3.39E+00 +/- 1.86E-01	1.31E+00	2.98E-04 +/- 1.80E-05
	20	423.23	9.90E-02 +/- 6.10E-02	1.30E+00	2.92E-04 +/- 1.81E-05
	21	452.10	4.24E-01 +/- 8.24E-02	1.29E+00	2.76E-04 +/- 1.81E-05
	22	722.01	1.39E-01 +/- 4.62E-02	1.23E+00	1.81E-04 +/- 9.66E-06
	23	778.90	2.98E-02 +/- 1.91E-02	1.22E+00	1.70E-04 +/- 8.37E-06
	24	1085.91	3.47E-02 +/- 1.73E-02	1.18E+00	1.28E-04 +/- 5.58E-06
	25	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.06 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.275 +/- 0.0117
SE-75	264.65	0.000 +/- 0.0000	0.385 +/- 0.0115
SE-75	279.53	0.000 +/- 0.0000	0.395 +/- 0.0162
SE-75	400.65	0.000 +/- 0.0000	0.526 +/- 0.0300

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.77	2.84E-01 +/- 1.08E-01	2.26E+00	9.82E-10 +/- 6.31E-09
	2	50.51	1.24E+00 +/- 3.90E-01	1.83E+00	2.00E-06 +/- 5.09E-06
	3	60.22	4.39E+01 +/- 9.08E-01	1.75E+00	1.24E-05 +/- 2.04E-05
	4	99.36	1.55E+00 +/- 4.92E-01	1.62E+00	2.33E-04 +/- 5.75E-05
	5	104.04	1.28E+00 +/- 3.13E-01	1.61E+00	2.68E-04 +/- 4.96E-05
	6	111.78	4.40E-01 +/- 2.94E-01	1.60E+00	3.23E-04 +/- 3.49E-05
	7	129.29	3.53E+00 +/- 3.03E-01	1.58E+00	4.21E-04 +/- 2.67E-05
	8	204.19	3.52E-01 +/- 1.65E-01	1.47E+00	4.86E-04 +/- 5.44E-05
	9	208.70	6.18E-01 +/- 2.22E-01	1.47E+00	4.81E-04 +/- 5.23E-05
	10	333.54	2.38E-01 +/- 1.13E-01	1.33E+00	3.24E-04 +/- 1.53E-05
	11	345.47	5.89E-01 +/- 1.17E-01	1.32E+00	3.13E-04 +/- 1.53E-05
	12	375.80	5.97E-01 +/- 1.66E-01	1.29E+00	2.88E-04 +/- 1.59E-05
M	13	380.83	2.03E-01 +/- 6.71E-02	1.28E+00	2.84E-04 +/- 1.60E-05
m	14	383.37	1.85E-01 +/- 6.28E-02	1.28E+00	2.82E-04 +/- 1.60E-05
	15	393.71	2.64E-01 +/- 7.83E-02	1.27E+00	2.75E-04 +/- 1.62E-05
	16	413.70	1.16E+00 +/- 1.12E-01	1.26E+00	2.62E-04 +/- 1.65E-05
	17	443.98	9.91E-02 +/- 4.06E-02	1.25E+00	2.45E-04 +/- 1.65E-05
	18	452.35	1.74E-01 +/- 6.27E-02	1.25E+00	2.40E-04 +/- 1.65E-05
	19	662.42	9.93E-02 +/- 3.40E-02	1.20E+00	1.75E-04 +/- 1.08E-05
	20	722.01	9.17E-02 +/- 4.40E-02	1.19E+00	1.64E-04 +/- 9.17E-06
	21	778.90	3.89E-02 +/- 2.58E-02	1.18E+00	1.56E-04 +/- 8.00E-06
	22	867.39	7.55E-02 +/- 3.53E-02	1.17E+00	1.44E-04 +/- 6.82E-06
	23	2236.00	1.00E+02 +/- 1.50E+00	1.11E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.22 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.745 +/- 0.0206
SE-75	264.65	0.000 +/- 0.0000	0.817 +/- 0.0195
SE-75	279.53	0.000 +/- 0.0000	0.800 +/- 0.0250
SE-75	400.65	0.000 +/- 0.0000	0.833 +/- 0.0381

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	60.21	2.30E+01 +/- 6.12E-01	1.15E+00	5.63E-05 +/- 2.42E-05
	2	99.56	1.41E+00 +/- 3.21E-01	1.13E+00	1.69E-04 +/- 2.08E-05
	3	104.19	4.59E-01 +/- 2.25E-01	1.12E+00	1.80E-04 +/- 1.94E-05
M	4	126.08	4.55E-01 +/- 9.91E-02	1.12E+00	2.22E-04 +/- 1.49E-05
m	5	130.08	1.86E+00 +/- 2.37E-01	1.12E+00	2.28E-04 +/- 1.46E-05
	6	208.62	3.80E-01 +/- 1.47E-01	1.09E+00	2.62E-04 +/- 1.78E-05
	7	264.66	3.37E-01 +/- 8.62E-02	1.08E+00	2.43E-04 +/- 1.53E-05
	8	345.72	1.48E-01 +/- 6.74E-02	1.08E+00	2.07E-04 +/- 1.08E-05
	9	375.85	5.72E-01 +/- 1.24E-01	1.07E+00	1.94E-04 +/- 9.72E-06
	10	393.44	1.34E-01 +/- 6.40E-02	1.07E+00	1.87E-04 +/- 9.26E-06
	11	413.70	5.95E-01 +/- 8.23E-02	1.07E+00	1.79E-04 +/- 8.85E-06
	12	722.01	3.64E-02 +/- 2.70E-02	1.05E+00	1.06E-04 +/- 6.56E-06
	13	778.90	1.62E-02 +/- 1.68E-02	1.05E+00	9.86E-05 +/- 6.05E-06
	14	1333.24	9.20E-02 +/- 3.48E-02	1.04E+00	6.64E-05 +/- 4.05E-06
	15	1408.01	8.64E-03 +/- 1.94E-02	1.04E+00	6.48E-05 +/- 4.76E-06
	16	2236.00	1.00E+02 +/- 1.50E+00	1.03E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85601657
Peak Locate Performed on: 8-30-07 11:04:22 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.64	0.2185	31.98	9.66
2	101.08	0.2025	50.21	9.53
3	121.09	0.0480	60.21	188.92
4	191.30	0.1213	95.31	31.47
5	199.43	0.0836	99.38	55.98
6	209.13	0.1079	104.23	33.02
7	224.10	0.1198	111.72	29.25
8	232.54	0.1486	115.94	11.33
9	247.80	0.0767	123.71	72.70
10	252.60	0.0767	125.97	72.70
11	260.81	0.0767	130.03	72.70
12	290.31	0.2623	144.82	7.16
13	299.40	0.1971	149.37	12.13
14	323.75	0.2463	161.54	5.65
15	344.83	0.2810	172.08	6.00
16	360.81	0.2948	180.07	5.37
17	393.57	0.2665	196.45	5.97
18	409.06	0.1286	204.20	25.88
19	418.08	0.1032	208.70	39.37
20	512.85	0.2677	256.09	5.72
21	625.89	0.2349	312.61	8.06
22	667.51	0.1254	333.44	23.91
23	674.18	0.2389	336.50	8.60
24	684.65	0.2740	342.14	7.04
25	692.00	0.1259	345.67	25.90
26	752.07	0.0943	375.70	44.41
27	762.12	0.1731	380.90	15.03
28	767.81	0.1993	383.40	11.83
29	787.86	0.1289	393.60	23.05
30	829.48	0.0939	414.41	38.81
31	847.35	0.1961	423.34	9.87
32	904.96	0.1616	452.14	14.95
33	1119.05	0.2708	559.19	5.60
34	1326.85	0.2571	663.09	5.68
35	1447.00	<NA>	722.80	<NA>
36	2348.68	0.2343	1174.01	5.84

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	2667.30	0.2199	1333.32	6.06
38	4449.96	0.2255	2224.64	5.31
39	4471.87	0.0263	2235.60	412.02

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85601657
Peak Analysis Performed on: 8-30-07 11:04:22 AM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	61-	71	64.64	31.98	7.77E+02	57.92	9.40E+02
	2	94-	105	101.08	50.21	2.96E+03	190.91	1.26E+04
	3	114-	127	121.09	60.21	6.61E+04	319.39	1.29E+04
	4	184-	194	191.30	95.31	2.57E+02	162.23	1.04E+04
	5	194-	206	199.43	99.38	6.63E+02	240.79	2.15E+04
	6	206-	215	209.13	104.23	4.62E+03	143.51	6.50E+03
	7	217-	228	224.10	111.72	9.45E+02	146.22	7.85E+03
	8	228-	239	232.54	115.94	1.19E+03	153.06	8.25E+03
M	9	247-	267	248.09	123.71	4.68E+01	35.20	1.98E+03
m	10	247-	267	252.61	125.97	9.55E+02	50.32	2.65E+03
m	11	247-	267	260.73	130.03	9.30E+03	153.84	2.32E+03
	12	283-	295	290.31	144.82	1.67E+02	100.46	3.73E+03
	13	295-	303	299.40	149.37	2.89E+02	78.01	2.69E+03
	14	318-	328	323.75	161.54	2.06E+02	82.84	2.77E+03
	15	337-	351	344.83	172.08	3.09E+02	97.41	3.19E+03
	16	358-	365	360.81	180.07	1.60E+02	57.17	1.54E+03
	17	389-	397	393.57	196.45	1.95E+02	60.74	1.63E+03
	18	406-	412	409.06	204.20	1.30E+03	61.70	1.32E+03
	19	412-	425	418.08	208.70	7.28E+02	117.26	4.26E+03
	20	509-	520	512.85	256.09	1.30E+02	53.11	1.06E+03
	21	618-	628	625.89	312.61	1.76E+02	42.83	6.97E+02
M	22	663-	681	667.56	333.44	1.22E+03	62.93	5.94E+02
m	23	663-	681	673.67	336.50	2.81E+02	27.41	6.92E+02
M	24	681-	699	684.95	342.14	1.68E+02	21.79	4.34E+02
m	25	681-	699	692.00	345.67	1.23E+03	60.99	3.86E+02
	26	746-	759	752.07	375.70	2.32E+03	85.25	1.62E+03
M	27	759-	775	762.48	380.90	5.92E+02	39.43	3.60E+02
m	28	759-	775	767.46	383.40	5.26E+02	35.23	3.04E+02
	29	780-	795	787.86	393.60	1.12E+03	46.78	3.57E+02
	30	824-	837	829.48	414.41	3.00E+03	60.71	2.46E+02
	31	839-	851	847.35	423.34	1.49E+02	29.01	2.63E+02
	32	899-	912	904.96	452.14	4.11E+02	29.14	1.59E+02
	33	1110-	1123	1119.05	559.19	6.96E+01	19.75	1.16E+02
	34	1322-	1330	1326.85	663.09	7.58E+01	21.11	6.72E+01
F	35	1442-	1451	1446.27	722.80	7.06E+01	17.44	4.00E+01
	36	2344-	2353	2348.68	1174.01	6.85E+01	12.38	3.75E+01
	37	2658-	2676	2667.30	1333.32	9.80E+01	16.36	5.00E+01

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
38	4445-	4456	4449.96	2224.64	6.26E+01	10.05	1.54E+01
39	4466-	4477	4471.87	2235.60	1.85E+05	430.49	7.79E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85601657
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.989	2236.00*	100.00	7.754E+02	1.808E+02
Np-237	0.733	300.10	6.63		
		311.90*	38.60	4.532E-01	1.100E-01
Pu-239	0.965	413.70*	0.00	2.435E+05	6.696E+03
Pu-239A	0.962	129.29*	0.01	1.527E+05	4.453E+03
Am-241	0.968	662.42*	0.00	3.304E+04	9.206E+03
Am-241D	0.957	722.01*	0.00	6.717E+04	1.660E+04
Pu-241	0.955	148.57*	0.00	1.424E+05	3.847E+04

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-30-07 11:04:22 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	31.98	6.7416E+00	7.46
2	50.21	2.5716E+01	6.44
3	60.21	5.7301E+02	0.55
4	95.31	2.2270E+00	63.19
5	99.38	5.7542E+00	36.30
6	104.23	4.0088E+01	3.12
7	111.72	8.1962E+00	15.48
8	115.94	1.0328E+01	12.86
M 9	123.71	4.0619E-01	75.17
m 10	125.97	8.2850E+00	5.27
12	144.82	1.4490E+00	60.14
14	161.54	1.7859E+00	40.24
15	172.08	2.6839E+00	31.48
16	180.07	1.3865E+00	35.77
17	196.45	1.6936E+00	31.11
18	204.20	1.1246E+01	4.77
19	208.70	6.3162E+00	16.11
20	256.09	1.1246E+00	40.96
M 22	333.44	1.0612E+01	5.15
m 23	336.50	2.4380E+00	9.75
M 24	342.14	1.4547E+00	13.00
m 25	345.67	1.0711E+01	4.95
26	375.70	2.0142E+01	3.68
M 27	380.90	5.1353E+00	6.66
m 28	383.40	4.5597E+00	6.71
29	393.60	9.6992E+00	4.19
31	423.34	1.2903E+00	19.50
32	452.14	3.5610E+00	7.10
33	559.19	6.0395E-01	28.36
36	1174.01	5.9419E-01	18.07
37	1333.32	8.5051E-01	16.69
38	2224.64	5.4265E-01	16.07

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.59E+02	+/-	1.27E+02		2.21E-02	+/-	3.26E-03
SE-75	<	8.02E-02	+/-	5.26E-03	<	2.06E-06	+/-	1.35E-07
EU-152x	<	2.10E-01	+/-	1.55E-02	<	5.40E-06	+/-	3.98E-07
U-233	<	4.59E+03	+/-	3.66E+02	<	1.18E-01	+/-	9.40E-03
U-235	<	1.08E-01	+/-	7.39E-03	<	2.77E-06	+/-	1.90E-07
Np-237		4.27E-01	+/-	7.82E-02		1.10E-05	+/-	2.01E-06
Pu-238	<	7.88E+03	+/-	4.85E+02	<	2.02E-01	+/-	1.25E-02
U-238		1.31E+00	+/-	5.90E-01		3.37E-05	+/-	1.51E-05
Pu-239		2.23E+05	+/-	6.51E+03		5.73E+00	+/-	1.67E-01
Pu-239A		1.33E+05	+/-	3.40E+03		3.40E+00	+/-	8.73E-02
Am-241		2.51E+04	+/-	4.51E+03		6.43E-01	+/-	1.16E-01
Am-241D		5.66E+04	+/-	1.04E+04		1.45E+00	+/-	2.67E-01
Pu-241		1.74E+05	+/-	2.73E+04		4.47E+00	+/-	7.02E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	6.07E-04	+/-	1.11E-04
U-238	3.91E+00	+/-	1.76E+00
Pu-239	3.59E+00	+/-	1.05E-01
Pu-239A	2.13E+00	+/-	5.48E-02
Am-241	7.32E-03	+/-	1.32E-03
Pu-241	1.68E-03	+/-	2.64E-04

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.75E+02	+/-	1.81E+02		1.99E-02	+/-	4.64E-03
SE-75	<	3.42E-01	+/-	3.18E-03	<	8.79E-06	+/-	8.15E-08
EU-152x	<	5.62E-01	+/-	1.03E-02	<	1.44E-05	+/-	2.66E-07
U-233	<	2.39E+04	+/-	5.21E+02	<	6.13E-01	+/-	1.34E-02
U-235	<	4.80E-01	+/-	1.10E-02	<	1.23E-05	+/-	2.83E-07
Np-237		4.53E-01	+/-	1.10E-01		1.16E-05	+/-	2.83E-06
Pu-238	<	3.66E+04	+/-	7.04E+02	<	9.40E-01	+/-	1.81E-02
U-238	<	1.50E+01	+/-	2.39E-01	<	3.85E-04	+/-	6.14E-06
Pu-239		2.44E+05	+/-	6.70E+03		6.25E+00	+/-	1.72E-01
Pu-239A		1.53E+05	+/-	4.45E+03		3.92E+00	+/-	1.14E-01
Am-241		3.30E+04	+/-	9.21E+03		8.48E-01	+/-	2.36E-01
Am-241D		6.72E+04	+/-	1.66E+04		1.72E+00	+/-	4.26E-01
Pu-241		1.42E+05	+/-	3.85E+04		3.65E+00	+/-	9.88E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	6.44E-04	+/-	1.56E-04
Pu-239	3.92E+00	+/-	1.08E-01
Pu-239A	2.46E+00	+/-	7.17E-02
Am-241	9.65E-03	+/-	2.69E-03
Pu-241	1.38E-03	+/-	3.72E-04

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.969	+/-	11.3420
Matrix Longitudinal Ratio:	0.994	+/-	1.5209
Source Vertical Ratio:	0.530	+/-	0.2643
Matrix Vertical Ratio:	0.952	+/-	0.0854

NUDS could not find the transmission peak in one radial segment.

Radioassay Data Sheet — Tue Aug 21 04:05:56 2007
Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: LL85601657-R	Gross Weight (kg)	: 62.8
Sequence Number	: 2378	Fill Height (%)	: 100.0
Assay Date	: 08/21/07 14:59:42	Density (g/cc)	: 0.19
		Net Weight (kg)	: 38.95
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	9.69e-06	+/-	1.31e-06 Ci/g
Total Pu-239 Equiv Activity:	3.84e-01	+/-	5.11e-02 Ci
Total Pu-239 Fissile Gram Equiv:	4.17e+00	+/-	7.88e-01 g
Decay Heat:	1.20e-02	+/-	1.61e-03 W
Total Pu Mass:	4.43e+00	+/-	7.90e-01 g
TMU:	18.96%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	4.23e-02	4.26e+00
Pu-239	9.38e+01	1.47e-01
Pu-240	5.97e+00	2.30e+00
Pu-241	1.08e-01	2.58e+00
Pu-242	2.54e-02	1.10e+01
Am-241	2.66e-01	1.67e+00
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	1.88e-03	3.64e-04	3.21e-02	6.24e-03	4.41e-04
Pu-239	4.16e+00	7.88e-01	2.58e-01	4.89e-02	3.75e-02
Pu-240	2.65e-01	5.05e-02	6.01e-02	1.15e-02	0.00e+00
Pu-241	4.77e-03	9.13e-04	4.93e-01	9.44e-02	4.10e-04
Pu-242	1.13e-03	2.47e-04	4.42e-06	9.69e-07	0.00e+00
Am-241	8.08e-03	2.06e-03	2.76e-02	7.05e-03	2.62e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	2.95e-04	9.39e-05	2.08e-07	6.62e-08	1.90e-04
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	4.80e-02
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.58e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	4.60e-01
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Robert J. Hartlett — Yes — 8-30-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85601657-R
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2378
Assayed on: 08/21/07 14:59:42
Report Generated: 08/21/07 16:05:41
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

Pu-240 Wt Pct <5.97> +/- 2 Sigma error <0.27>
is within limits
Pu-240 Wt Pct error <2.30> is within limits
Pu-238 Wt Pct error <4.26> is within limits
QFIT <1.04> is within limits
REVIEW MGAERR12: Calculations in MGAABS didn't converge: MGA results may be suspect OK

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.187> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.53e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.61> is acceptable in Segment 1
Pulser value <0.98> is within range in Segment 1
DEAD TIME percentage <0.70> is acceptable in Segment 2
Pulser value <0.98> is within range in Segment 2
DEAD TIME percentage <0.74> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <0.71> is acceptable in Segment 4
Pulser value <0.99> is within range in Segment 4
DEAD TIME percentage <0.67> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <0.66> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <0.77> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <0.93> is acceptable in Segment 8
Pulser value <0.99> is within range in Segment 8
DEAD TIME percentage <1.11> is acceptable in Segment 9
Pulser value <1.00> is within range in Segment 9
DEAD TIME percentage <0.92> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <0.75> is acceptable in Segment 11
Pulser value <1.00> is within range in Segment 11
DEAD TIME percentage <0.98> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <1.21> is acceptable in Segment 13
Pulser value <1.00> is within range in Segment 13
DEAD TIME percentage <1.03> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.83> is acceptable in Segment 15

Pulser value <0.99> is within range in Segment 15
DEAD TIME percentage <0.68> is acceptable in Segment 16
Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4 OK
REVIEW Fiducial Transmission Line <400.645996> < <0.01> found in Segment 5
Transmission results are acceptable in Segment 6
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

All energy peaks within <3.00e+00> RCHISQ limit

Section 7 - FGE MASS REVIEW

FGE Mass <4.96> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <514.68> is above lower limit <200.00> OK
Np-237 ratio <14105.71> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <4.16> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

REVIEW Cs-137 Z Value <2.09> exceeds limit <1.96> OK. Checked.

Independent Reviewer: Robert J Hazlitt Jr Date: 8-30-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85601657-R
Item Description Code:
Sequence Number: 2378
Assayed on: 08/21/07 14:59:42
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA	
MGAERR12	OK
SECTION 5 - TRANSMISSION	
Fiducial Transmission Line less than 0.01 found in Segment 5	OK. Ratio 129/413 OK.
SECTION 9 - IDC COUNT TYPE	
IDC is not available.	N/A
SECTION 12 - CS-137 INTERFERENCE TEST	
Potential Cs-137 presence.	Ok. Checked.

Technical Reviewer: Robert J Hashitt Jr Date: 8-30-07

```
*********************************************************************
*****                    M G A   R E P O R T                    *****
*********************************************************************
```

Report generated on: 8-21-07 3:56:38 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202378.CNF Sens : 30.0% LT: 55.9 Mins DT: 0.62
Measurement date: 8-21-07 Declared date: 8-21-07

Sample ID: LL85601657-R Detector: Total counts: 6.686E+05

Pu g/cm2 = 0.2505 Cd g/cm2 = 1.5746 FWHM at 122 keV = 631 eV
QFIT = 1.04 FWHM at 208 keV = 807 eV
NQFIT = 1.00

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000451	4.3	4.2	0.3930	4.5	0.04234	4.26	0.04234	4.26
Pu-239	1.000000	0.0	1.1	871.2359	2.6	93.84985	0.15	93.84985	0.15
Pu-240	0.063662	2.4	2.2	55.4646	3.2	5.97467	2.30	5.97467	2.30
Pu-241	0.001148	2.6	2.4	1.0000	0.0	0.10772	2.58	0.10772	2.58
Pu-242	(New alg.	)		0.2361	(11)	0.02543	(11)	0.02543	(11)
Am-241	0.002833	1.7	1.4	2.4684	2.7	0.26589	1.67	0.26589	1.67

Pu-240 effective (meas. date) = 6.124 +/- 2.49%
Am-241 separated about 25.748 +/- 0.531 years ago
Am/Pu-241 weight ratio = 2.46838 +/- 2.76%

Messages :

Lead x-rays detected.
Calculations in MGAABS didn't converge : results may be suspect.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102378.S11
Sample ID: LL85601657-R Count Sequence Number: 2378
Assay Start: 8-21-07 2:59:44 PM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 62800.0 g Net: 38950.0 g
Density: 0.187 g /ml

Container Type: 55 Gal Galv 23.8
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv 23.8
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 3:07:06 PM 78569

Reviewed by: Robert J Hazlett Jr Date: 8-30-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.30 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.360 +/- 0.0129
SE-75	264.65	0.000 +/- 0.0000	0.455 +/- 0.0126
SE-75	279.53	0.000 +/- 0.0000	0.440 +/- 0.0169
SE-75	400.65	0.000 +/- 0.0000	0.521 +/- 0.0297

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.20	1.30E+01 +/- 4.51E-01	1.57E+00	6.37E-06 +/- 1.17E-05
2	99.35	8.49E-01 +/- 2.01E-01	1.48E+00	1.51E-04 +/- 4.18E-05
3	104.09	7.99E-01 +/- 1.92E-01	1.47E+00	1.78E-04 +/- 3.66E-05
4	129.29	1.02E+00 +/- 1.65E-01	1.44E+00	3.01E-04 +/- 2.13E-05
5	208.62	2.46E-01 +/- 1.13E-01	1.37E+00	3.80E-04 +/- 4.54E-05
6	244.70	1.74E-01 +/- 6.45E-02	1.34E+00	3.45E-04 +/- 3.02E-05
7	375.79	2.92E-01 +/- 7.96E-02	1.28E+00	2.25E-04 +/- 1.40E-05
8	413.70	3.17E-01 +/- 6.10E-02	1.26E+00	2.03E-04 +/- 1.44E-05
9	662.42	3.66E-02 +/- 2.11E-02	1.21E+00	1.27E-04 +/- 8.85E-06
10	2236.00	1.00E+02 +/- 1.49E+00	1.11E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 114.19 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.179 +/- 0.0095
SE-75	264.65	0.000 +/- 0.0000	0.278 +/- 0.0092
SE-75	279.53	0.000 +/- 0.0000	0.289 +/- 0.0137
SE-75	400.65	0.000 +/- 0.0000	0.380 +/- 0.0249

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	50.17	1.94E+00 +/- 3.86E-01	2.17E+00	8.41E-05 +/- 2.13E-04
2	60.20	2.55E+01 +/- 6.47E-01	2.05E+00	1.33E-04 +/- 2.14E-04
3	99.38	2.10E+00 +/- 2.89E-01	1.86E+00	3.09E-04 +/- 7.51E-05
4	125.62	3.88E-01 +/- 1.28E-01	1.81E+00	3.81E-04 +/- 2.25E-05
5	129.29	2.44E+00 +/- 2.12E-01	1.80E+00	3.88E-04 +/- 2.47E-05
6	208.71	6.24E-01 +/- 1.63E-01	1.65E+00	4.25E-04 +/- 4.49E-05
7	333.66	2.43E-01 +/- 9.67E-02	1.48E+00	3.42E-04 +/- 1.64E-05
8	345.47	2.45E-01 +/- 8.67E-02	1.47E+00	3.34E-04 +/- 1.66E-05
9	375.82	5.21E-01 +/- 8.02E-02	1.44E+00	3.13E-04 +/- 1.76E-05
10	383.39	1.76E-01 +/- 6.61E-02	1.43E+00	3.08E-04 +/- 1.78E-05
11	393.82	2.32E-01 +/- 7.44E-02	1.42E+00	3.01E-04 +/- 1.81E-05
12	413.70	4.99E-01 +/- 7.52E-02	1.41E+00	2.89E-04 +/- 1.85E-05
13	722.01	5.90E-02 +/- 3.90E-02	1.30E+00	1.71E-04 +/- 9.64E-06
14	1112.12	3.45E-02 +/- 1.73E-02	1.23E+00	1.18E-04 +/- 5.17E-06
15	1173.83	7.55E-02 +/- 3.17E-02	1.22E+00	1.13E-04 +/- 4.91E-06
16	1408.01	1.72E-02 +/- 1.22E-02	1.20E+00	1.02E-04 +/- 6.88E-06
17	2236.00	1.00E+02 +/- 1.49E+00	1.16E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 114.15 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.107 +/- 0.0074
SE-75	264.65	0.000 +/- 0.0000	0.179 +/- 0.0069
SE-75	279.53	0.000 +/- 0.0000	0.182 +/- 0.0106
SE-75	400.65	0.000 +/- 0.0000	0.212 +/- 0.0184

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	49.60	1.50E+00 +/- 3.66E-01	2.62E+00	3.75E-05 +/- 1.85E-05
	2	60.22	2.90E+01 +/- 7.10E-01	2.44E+00	8.10E-05 +/- 2.79E-05
	3	99.39	2.64E+00 +/- 2.94E-01	2.18E+00	2.97E-04 +/- 3.03E-05
	4	103.99	1.15E+00 +/- 2.59E-01	2.16E+00	3.20E-04 +/- 2.87E-05
	5	111.65	6.65E-01 +/- 2.49E-01	2.14E+00	3.54E-04 +/- 2.60E-05
M	6	125.97	4.16E-01 +/- 9.52E-02	2.10E+00	4.08E-04 +/- 2.26E-05
m	7	130.02	3.71E+00 +/- 3.17E-01	2.09E+00	4.20E-04 +/- 2.22E-05
	8	148.57	5.62E-01 +/- 2.05E-01	2.04E+00	4.63E-04 +/- 2.25E-05
	9	204.24	2.55E-01 +/- 1.08E-01	1.91E+00	4.93E-04 +/- 2.59E-05
	10	208.70	3.87E-01 +/- 1.84E-01	1.90E+00	4.92E-04 +/- 2.59E-05
	11	311.90	1.86E-01 +/- 7.63E-02	1.76E+00	4.04E-04 +/- 1.79E-05
	12	333.34	3.74E-01 +/- 1.14E-01	1.75E+00	3.84E-04 +/- 1.63E-05
	13	345.70	2.37E-01 +/- 7.90E-02	1.74E+00	3.72E-04 +/- 1.56E-05
	14	375.70	5.26E-01 +/- 1.29E-01	1.72E+00	3.46E-04 +/- 1.41E-05
	15	393.76	2.31E-01 +/- 6.10E-02	1.71E+00	3.31E-04 +/- 1.34E-05
	16	413.70	5.54E-01 +/- 9.19E-02	1.69E+00	3.16E-04 +/- 1.28E-05
	17	423.28	1.07E-01 +/- 4.33E-02	1.68E+00	3.09E-04 +/- 1.26E-05
	18	964.13	6.42E-02 +/- 2.97E-02	1.42E+00	1.39E-04 +/- 5.75E-06
	19	1001.03	5.57E-02 +/- 2.84E-02	1.41E+00	1.35E-04 +/- 5.37E-06
	20	1408.01	1.73E-02 +/- 1.22E-02	1.34E+00	1.15E-04 +/- 7.14E-06
	21	2236.00	1.00E+02 +/- 1.50E+00	1.27E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 114.18 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.060 +/- 0.0056
SE-75	264.65	0.000 +/- 0.0000	0.098 +/- 0.0052
SE-75	279.53	0.000 +/- 0.0000	0.112 +/- 0.0087
SE-75	400.65	0.000 +/- 0.0000	0.184 +/- 0.0163

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.19	1.27E+00 +/- 3.89E-01	3.13E+00	1.08E-05 +/- 2.69E-05
	2	60.22	2.48E+01 +/- 6.45E-01	2.90E+00	3.64E-05 +/- 5.78E-05
	3	99.38	1.36E+00 +/- 3.00E-01	2.56E+00	2.64E-04 +/- 6.34E-05
	4	111.63	3.65E-01 +/- 1.97E-01	2.50E+00	3.34E-04 +/- 3.63E-05
M	5	126.10	2.71E-01 +/- 8.62E-02	2.45E+00	4.00E-04 +/- 2.38E-05
m	6	130.04	2.81E+00 +/- 2.79E-01	2.44E+00	4.14E-04 +/- 2.68E-05
	7	208.77	6.84E-01 +/- 1.47E-01	2.24E+00	4.80E-04 +/- 5.04E-05
M	8	333.78	1.99E-01 +/- 7.20E-02	1.92E+00	3.57E-04 +/- 1.65E-05
m	9	336.67	1.05E-01 +/- 4.65E-02	1.91E+00	3.54E-04 +/- 1.65E-05
	10	345.79	3.95E-01 +/- 9.50E-02	1.89E+00	3.46E-04 +/- 1.65E-05
	11	375.65	4.29E-01 +/- 1.02E-01	1.83E+00	3.21E-04 +/- 1.71E-05
	12	393.70	1.81E-01 +/- 6.23E-02	1.79E+00	3.07E-04 +/- 1.75E-05
	13	413.70	6.19E-01 +/- 8.90E-02	1.76E+00	2.94E-04 +/- 1.78E-05
	14	778.90	8.63E-03 +/- 3.58E-02	1.53E+00	1.66E-04 +/- 8.40E-06
	15	867.39	3.34E-02 +/- 2.83E-02	1.49E+00	1.52E-04 +/- 7.25E-06
	16	2236.00	1.00E+02 +/- 1.49E+00	1.30E+00	7.00E-05 +/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 114.23 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.024 +/- 0.0043
SE-75	264.65	0.000 +/- 0.0000	0.038 +/- 0.0032
SE-75	279.53	0.000 +/- 0.0000	0.044 +/- 0.0063
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.06	5.78E-01 +/- 2.24E-01	4.02E+00	1.60E-05 +/- 4.32E-05
	2	60.22	1.54E+01 +/- 5.10E-01	3.70E+00	4.82E-05 +/- 8.25E-05
	3	99.37	7.08E-01 +/- 3.42E-01	3.21E+00	2.78E-04 +/- 7.10E-05
	4	104.37	6.45E-01 +/- 2.27E-01	3.17E+00	3.05E-04 +/- 5.71E-05
	5	115.60	3.54E-01 +/- 2.33E-01	3.11E+00	3.58E-04 +/- 3.01E-05
	6	129.29	2.36E+00 +/- 2.12E-01	3.04E+00	4.07E-04 +/- 2.65E-05
	7	208.66	3.55E-01 +/- 1.27E-01	2.83E+00	4.56E-04 +/- 5.12E-05
M	8	333.62	1.02E-01 +/- 2.37E-02	2.50E+00	3.43E-04 +/- 1.67E-05
m	9	336.38	1.21E-01 +/- 3.06E-02	2.49E+00	3.41E-04 +/- 1.67E-05
	10	345.93	1.32E-01 +/- 6.17E-02	2.47E+00	3.33E-04 +/- 1.69E-05
	11	375.80	4.39E-01 +/- 1.20E-01	2.41E+00	3.11E-04 +/- 1.79E-05
	12	393.46	1.96E-01 +/- 7.53E-02	2.38E+00	2.99E-04 +/- 1.85E-05
	13	413.70	5.63E-01 +/- 7.92E-02	2.34E+00	2.86E-04 +/- 1.90E-05
	14	964.13	3.78E-02 +/- 2.60E-02	1.79E+00	1.39E-04 +/- 6.40E-06
	15	1112.12	2.59E-02 +/- 1.50E-02	1.72E+00	1.23E-04 +/- 5.54E-06
	16	1408.01	8.63E-03 +/- 8.64E-03	1.63E+00	1.00E-04 +/- 6.78E-06
	17	2236.00	1.00E+02 +/- 1.50E+00	1.50E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 114.24 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.079 +/- 0.0068
SE-75	264.65	0.000 +/- 0.0000	0.125 +/- 0.0058
SE-75	279.53	0.000 +/- 0.0000	0.140 +/- 0.0091
SE-75	400.65	0.000 +/- 0.0000	0.159 +/- 0.0161

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.22	1.16E+01 +/- 4.45E-01	2.68E+00	6.11E-05 +/- 9.96E-05
2	99.34	1.26E+00 +/- 3.35E-01	2.38E+00	3.06E-04 +/- 7.50E-05
3	111.79	8.10E-01 +/- 2.19E-01	2.33E+00	3.69E-04 +/- 3.97E-05
4	129.29	2.35E+00 +/- 2.41E-01	2.28E+00	4.31E-04 +/- 2.73E-05

5	204.28	2.00E-01	+/-	1.24E-01	2.10E+00	4.75E-04	+/- 5.26E-05
6	208.69	7.42E-01	+/-	1.31E-01	2.09E+00	4.72E-04	+/- 5.09E-05
7	333.19	1.61E-01	+/-	7.85E-02	1.89E+00	3.65E-04	+/- 1.73E-05
8	345.89	1.34E-01	+/-	8.81E-02	1.88E+00	3.55E-04	+/- 1.74E-05
9	375.68	5.01E-01	+/-	1.18E-01	1.87E+00	3.34E-04	+/- 1.84E-05
10	393.80	1.90E-01	+/-	6.28E-02	1.86E+00	3.22E-04	+/- 1.90E-05
11	413.70	5.37E-01	+/-	8.44E-02	1.84E+00	3.09E-04	+/- 1.95E-05
12	662.42	3.88E-02	+/-	2.75E-02	1.64E+00	2.10E-04	+/- 1.26E-05
13	2236.00	1.00E+02	+/-	1.49E+00	1.33E+00	4.34E-05	+/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 114.12 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.319 +/- 0.0127
SE-75	264.65	0.000 +/- 0.0000	0.404 +/- 0.0117
SE-75	279.53	0.000 +/- 0.0000	0.454 +/- 0.0178
SE-75	400.65	0.000 +/- 0.0000	0.511 +/- 0.0288

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)		Correction Factor	Original Efficiency	
	1	60.21	2.44E+01	+/- 6.42E-01	1.65E+00	1.61E-05	+/- 2.40E-05
	2	95.30	6.05E-01	+/- 2.61E-01	1.55E+00	2.12E-04	+/- 6.03E-05
	3	99.25	2.22E+00	+/- 4.40E-01	1.54E+00	2.42E-04	+/- 5.54E-05
	4	104.26	1.05E+00	+/- 3.18E-01	1.53E+00	2.81E-04	+/- 4.75E-05
	5	111.88	1.12E+00	+/- 2.53E-01	1.52E+00	3.36E-04	+/- 3.46E-05
M	6	125.91	5.71E-01	+/- 1.08E-01	1.51E+00	4.24E-04	+/- 2.46E-05
m	7	130.00	5.22E+00	+/- 3.72E-01	1.50E+00	4.45E-04	+/- 2.77E-05
	8	152.68	2.35E-01	+/- 1.36E-01	1.48E+00	5.26E-04	+/- 5.21E-05
	9	204.29	2.83E-01	+/- 1.55E-01	1.43E+00	5.51E-04	+/- 5.50E-05
	10	311.90	1.64E-01	+/- 9.18E-02	1.31E+00	4.17E-04	+/- 1.86E-05
	11	333.52	5.79E-01	+/- 1.04E-01	1.30E+00	3.91E-04	+/- 1.76E-05
	12	345.88	3.75E-01	+/- 1.03E-01	1.30E+00	3.78E-04	+/- 1.76E-05
	13	375.66	9.77E-01	+/- 1.57E-01	1.29E+00	3.49E-04	+/- 1.82E-05
M	14	380.93	2.35E-01	+/- 6.69E-02	1.28E+00	3.44E-04	+/- 1.83E-05
m	15	383.29	2.21E-01	+/- 6.33E-02	1.28E+00	3.42E-04	+/- 1.84E-05
	16	393.59	3.81E-01	+/- 9.78E-02	1.28E+00	3.33E-04	+/- 1.86E-05
	17	413.70	1.09E+00	+/- 1.10E-01	1.27E+00	3.17E-04	+/- 1.88E-05
	18	867.39	3.94E-02	+/- 3.39E-02	1.18E+00	1.62E-04	+/- 7.44E-06
	19	1333.39	1.21E-01	+/- 4.19E-02	1.14E+00	1.12E-04	+/- 5.95E-06
	20	1461.45	8.64E-02	+/- 2.74E-02	1.14E+00	1.01E-04	+/- 8.31E-06
	21	2236.00	1.00E+02	+/- 1.50E+00	1.11E+00	5.07E-05	+/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 113.93 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.360 +/- 0.0137
SE-75	264.65	0.000 +/- 0.0000	0.455 +/- 0.0129
SE-75	279.53	0.000 +/- 0.0000	0.506 +/- 0.0187
SE-75	400.65	0.000 +/- 0.0000	0.569 +/- 0.0315

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.96	5.58E-01 +/- 1.28E-01	1.95E+00	7.53E-06 +/- 7.35E-06
	2	49.61	2.17E+00 +/- 5.28E-01	1.64E+00	5.76E-05 +/- 2.88E-05
	3	60.21	4.95E+01 +/- 9.95E-01	1.57E+00	1.10E-04 +/- 3.84E-05
	4	78.40	6.01E-01 +/- 2.91E-01	1.51E+00	2.15E-04 +/- 4.18E-05
	5	99.36	4.96E+00 +/- 4.72E-01	1.48E+00	3.24E-04 +/- 3.31E-05
	6	111.77	7.72E-01 +/- 3.59E-01	1.46E+00	3.75E-04 +/- 2.72E-05
	7	116.10	8.10E-01 +/- 3.84E-01	1.46E+00	3.90E-04 +/- 2.56E-05
M	8	125.93	6.29E-01 +/- 1.17E-01	1.45E+00	4.19E-04 +/- 2.31E-05
m	9	130.03	9.17E+00 +/- 4.95E-01	1.44E+00	4.29E-04 +/- 2.26E-05
	10	148.57	3.80E-01 +/- 1.97E-01	1.42E+00	4.62E-04 +/- 2.28E-05
	11	161.71	4.49E-01 +/- 2.21E-01	1.41E+00	4.75E-04 +/- 2.42E-05
	12	208.71	1.61E+00 +/- 2.27E-01	1.37E+00	4.74E-04 +/- 2.60E-05
	13	311.90	1.59E-01 +/- 9.53E-02	1.27E+00	3.88E-04 +/- 1.78E-05
	14	333.47	8.20E-01 +/- 1.34E-01	1.26E+00	3.69E-04 +/- 1.62E-05
	15	345.72	7.23E-01 +/- 1.07E-01	1.25E+00	3.59E-04 +/- 1.54E-05
	16	375.73	1.74E+00 +/- 1.94E-01	1.24E+00	3.34E-04 +/- 1.38E-05
M	17	380.84	3.60E-01 +/- 8.34E-02	1.24E+00	3.30E-04 +/- 1.36E-05
m	18	383.61	3.79E-01 +/- 8.42E-02	1.24E+00	3.28E-04 +/- 1.35E-05
	19	393.64	6.48E-01 +/- 9.66E-02	1.23E+00	3.21E-04 +/- 1.31E-05
	20	413.70	2.00E+00 +/- 1.39E-01	1.23E+00	3.06E-04 +/- 1.25E-05
	21	423.07	1.40E-01 +/- 5.90E-02	1.22E+00	3.00E-04 +/- 1.22E-05
	22	452.24	3.14E-01 +/- 6.83E-02	1.22E+00	2.82E-04 +/- 1.16E-05
	23	1001.03	1.73E-02 +/- 1.22E-02	1.14E+00	1.35E-04 +/- 5.36E-06
	24	1112.12	2.60E-02 +/- 1.50E-02	1.13E+00	1.26E-04 +/- 4.65E-06
	25	1172.96	7.79E-02 +/- 3.93E-02	1.13E+00	1.22E-04 +/- 4.63E-06
	26	1408.01	2.60E-02 +/- 1.50E-02	1.11E+00	1.13E-04 +/- 7.00E-06
	27	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	1.19E-04 +/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 113.72 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.262 +/- 0.0122
SE-75	264.65	0.000 +/- 0.0000	0.404 +/- 0.0120
SE-75	279.53	0.000 +/- 0.0000	0.434 +/- 0.0178
SE-75	400.65	0.000 +/- 0.0000	0.496 +/- 0.0303

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.86	5.09E-01 +/- 1.51E-01	2.31E+00	5.60E-09 +/- 3.40E-08
	2	50.05	4.16E+00 +/- 6.94E-01	1.87E+00	3.08E-06 +/- 7.61E-06
	3	60.21	8.73E+01 +/- 1.48E+00	1.78E+00	1.66E-05 +/- 2.59E-05
	4	99.33	7.80E+00 +/- 5.34E-01	1.65E+00	2.35E-04 +/- 5.58E-05
	5	111.75	1.96E+00 +/- 3.89E-01	1.62E+00	3.22E-04 +/- 3.45E-05
M	6	125.92	1.04E+00 +/- 1.46E-01	1.61E+00	4.04E-04 +/- 2.41E-05
m	7	130.01	1.21E+01 +/- 5.56E-01	1.60E+00	4.24E-04 +/- 2.73E-05
	8	162.05	4.71E-01 +/- 2.26E-01	1.54E+00	5.13E-04 +/- 5.70E-05
	9	172.02	3.40E-01 +/- 2.14E-01	1.52E+00	5.22E-04 +/- 5.97E-05
	10	204.31	3.70E-01 +/- 2.47E-01	1.47E+00	5.14E-04 +/- 5.33E-05
	11	208.69	1.14E+00 +/- 2.99E-01	1.46E+00	5.11E-04 +/- 5.15E-05
M	12	333.51	1.16E+00 +/- 1.63E-01	1.32E+00	3.59E-04 +/- 1.71E-05
m	13	336.50	3.04E-01 +/- 7.13E-02	1.32E+00	3.56E-04 +/- 1.71E-05
	14	345.68	9.49E-01 +/- 2.20E-01	1.32E+00	3.46E-04 +/- 1.72E-05
	15	369.28	3.60E-01 +/- 1.09E-01	1.30E+00	3.24E-04 +/- 1.77E-05
	16	375.72	2.04E+00 +/- 2.49E-01	1.30E+00	3.18E-04 +/- 1.78E-05
M	17	380.87	4.90E-01 +/- 1.04E-01	1.30E+00	3.14E-04 +/- 1.79E-05
m	18	383.45	4.30E-01 +/- 9.11E-02	1.30E+00	3.12E-04 +/- 1.80E-05
	19	393.75	8.11E-01 +/- 1.08E-01	1.29E+00	3.03E-04 +/- 1.81E-05
	20	413.70	2.94E+00 +/- 1.74E-01	1.29E+00	2.88E-04 +/- 1.83E-05
	21	423.18	1.76E-01 +/- 7.00E-02	1.28E+00	2.82E-04 +/- 1.83E-05
	22	452.25	2.87E-01 +/- 8.07E-02	1.27E+00	2.63E-04 +/- 1.81E-05
	23	511.06	2.55E-01 +/- 5.99E-02	1.26E+00	2.33E-04 +/- 1.66E-05
	24	662.42	9.89E-02 +/- 4.18E-02	1.22E+00	1.84E-04 +/- 1.12E-05
	25	867.39	3.29E-02 +/- 2.38E-02	1.19E+00	1.49E-04 +/- 7.00E-06
	26	1112.12	1.76E-02 +/- 1.24E-02	1.16E+00	1.25E-04 +/- 5.44E-06
	27	2236.00	1.00E+02 +/- 1.51E+00	1.12E+00	6.12E-05 +/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 113.94 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.326 +/- 0.0129
SE-75	264.65	0.000 +/- 0.0000	0.442 +/- 0.0126
SE-75	279.53	0.000 +/- 0.0000	0.446 +/- 0.0179
SE-75	400.65	0.000 +/- 0.0000	0.521 +/- 0.0295

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.37	4.02E-01 +/- 1.42E-01	2.04E+00	1.74E-05 +/- 1.70E-05
2	50.09	1.69E+00 +/- 4.67E-01	1.71E+00	8.44E-05 +/- 4.22E-05
3	60.22	5.62E+01 +/- 1.09E+00	1.64E+00	1.38E-04 +/- 4.88E-05
4	99.39	5.66E+00 +/- 4.35E-01	1.53E+00	3.30E-04 +/- 3.40E-05
5	111.77	1.51E+00 +/- 3.06E-01	1.51E+00	3.72E-04 +/- 2.73E-05
6	129.29	7.15E+00 +/- 3.53E-01	1.49E+00	4.15E-04 +/- 2.22E-05
7	161.69	3.50E-01 +/- 2.13E-01	1.45E+00	4.54E-04 +/- 2.34E-05
8	196.62	2.94E-01 +/- 1.94E-01	1.41E+00	4.59E-04 +/- 2.52E-05
9	208.71	9.92E-01 +/- 2.37E-01	1.40E+00	4.56E-04 +/- 2.51E-05
10	255.88	1.69E-01 +/- 9.21E-02	1.35E+00	4.29E-04 +/- 2.23E-05
M 11	333.40	6.52E-01 +/- 1.27E-01	1.30E+00	3.71E-04 +/- 1.62E-05
m 12	336.28	2.01E-01 +/- 6.17E-02	1.30E+00	3.68E-04 +/- 1.60E-05
13	345.65	7.42E-01 +/- 1.16E-01	1.30E+00	3.62E-04 +/- 1.54E-05
14	368.74	3.92E-01 +/- 1.14E-01	1.28E+00	3.45E-04 +/- 1.43E-05
15	375.72	1.15E+00 +/- 1.89E-01	1.28E+00	3.40E-04 +/- 1.40E-05
M 16	380.96	3.25E-01 +/- 8.28E-02	1.28E+00	3.37E-04 +/- 1.38E-05
m 17	383.28	2.71E-01 +/- 7.04E-02	1.28E+00	3.35E-04 +/- 1.37E-05
18	393.48	7.25E-01 +/- 1.07E-01	1.27E+00	3.28E-04 +/- 1.34E-05
19	413.70	1.55E+00 +/- 1.30E-01	1.26E+00	3.15E-04 +/- 1.29E-05
20	452.38	1.94E-01 +/- 6.30E-02	1.25E+00	2.92E-04 +/- 1.22E-05
21	1112.12	3.47E-02 +/- 1.73E-02	1.15E+00	1.29E-04 +/- 4.78E-06
22	2236.00	1.00E+02 +/- 1.50E+00	1.11E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 114.14 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.199 +/- 0.0089
SE-75	264.65	0.000 +/- 0.0000	0.277 +/- 0.0092
SE-75	279.53	0.000 +/- 0.0000	0.281 +/- 0.0135
SE-75	400.65	0.000 +/- 0.0000	0.328 +/- 0.0235

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.89	1.31E-01 +/- 7.65E-02	2.65E+00	1.35E-03 +/- 8.78E-03
	2	60.21	2.32E+01 +/- 6.40E-01	1.97E+00	5.03E-04 +/- 8.45E-04
	3	99.42	2.63E+00 +/- 3.44E-01	1.80E+00	4.09E-04 +/- 1.03E-04
	4	111.69	6.09E-01 +/- 2.68E-01	1.78E+00	4.03E-04 +/- 4.47E-05
M	5	126.22	4.47E-01 +/- 1.04E-01	1.75E+00	4.00E-04 +/- 2.38E-05
m	6	130.03	3.55E+00 +/- 3.18E-01	1.75E+00	3.99E-04 +/- 2.64E-05
	7	208.71	6.15E-01 +/- 1.96E-01	1.63E+00	3.88E-04 +/- 4.34E-05
	8	333.46	4.69E-01 +/- 1.11E-01	1.52E+00	3.43E-04 +/- 1.63E-05
	9	345.56	2.14E-01 +/- 8.76E-02	1.51E+00	3.38E-04 +/- 1.65E-05
	10	375.63	1.06E+00 +/- 1.32E-01	1.50E+00	3.25E-04 +/- 1.79E-05
	11	393.55	4.54E-01 +/- 8.41E-02	1.49E+00	3.17E-04 +/- 1.87E-05
	12	413.70	7.31E-01 +/- 9.46E-02	1.48E+00	3.08E-04 +/- 1.94E-05
	13	1085.91	1.89E-02 +/- 1.82E-02	1.27E+00	1.27E-04 +/- 5.57E-06
	14	2236.00	1.00E+02 +/- 1.50E+00	1.19E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.87 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.224 +/- 0.0109
SE-75	264.65	0.000 +/- 0.0000	0.342 +/- 0.0107
SE-75	279.53	0.000 +/- 0.0000	0.322 +/- 0.0155
SE-75	400.65	0.000 +/- 0.0000	0.387 +/- 0.0270

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	49.82	7.87E-01 +/- 3.85E-01	1.99E+00	1.99E-06 +/- 5.07E-06
	2	60.22	3.43E+01 +/- 8.03E-01	1.89E+00	1.31E-05 +/- 2.09E-05
	3	104.23	4.40E+00 +/- 3.86E-01	1.72E+00	2.70E-04 +/- 4.84E-05
	4	111.68	1.89E+00 +/- 3.55E-01	1.71E+00	3.26E-04 +/- 3.52E-05
M	5	125.94	5.49E-01 +/- 1.30E-01	1.69E+00	4.16E-04 +/- 2.45E-05
m	6	130.05	5.93E+00 +/- 4.13E-01	1.68E+00	4.38E-04 +/- 2.82E-05
	7	148.57	3.37E-01 +/- 1.84E-01	1.65E+00	5.08E-04 +/- 5.12E-05
	8	208.75	1.49E+00 +/- 2.57E-01	1.54E+00	5.31E-04 +/- 5.52E-05
	9	311.90	2.97E-01 +/- 1.45E-01	1.47E+00	3.88E-04 +/- 1.81E-05
M	10	333.46	1.50E+00 +/- 1.85E-01	1.45E+00	3.62E-04 +/- 1.72E-05
m	11	336.35	3.97E-01 +/- 8.17E-02	1.45E+00	3.59E-04 +/- 1.72E-05
	12	345.75	1.40E+00 +/- 1.47E-01	1.44E+00	3.49E-04 +/- 1.72E-05
	13	368.87	6.26E-01 +/- 1.33E-01	1.42E+00	3.25E-04 +/- 1.77E-05
	14	375.72	2.49E+00 +/- 2.52E-01	1.42E+00	3.19E-04 +/- 1.78E-05
M	15	380.92	6.75E-01 +/- 1.09E-01	1.42E+00	3.14E-04 +/- 1.80E-05
m	16	383.44	8.60E-01 +/- 1.24E-01	1.42E+00	3.12E-04 +/- 1.80E-05
	17	393.55	1.46E+00 +/- 1.37E-01	1.41E+00	3.03E-04 +/- 1.82E-05
	18	413.70	3.48E+00 +/- 1.91E-01	1.40E+00	2.87E-04 +/- 1.84E-05
	19	423.16	2.58E-01 +/- 7.41E-02	1.39E+00	2.81E-04 +/- 1.84E-05
	20	452.11	3.44E-01 +/- 7.24E-02	1.38E+00	2.62E-04 +/- 1.82E-05
	21	511.76	1.86E-01 +/- 5.37E-02	1.36E+00	2.30E-04 +/- 1.67E-05
	22	662.42	8.47E-02 +/- 3.62E-02	1.31E+00	1.82E-04 +/- 1.13E-05
	23	964.13	3.16E-02 +/- 2.32E-02	1.25E+00	1.38E-04 +/- 6.29E-06
	24	2236.00	1.00E+02 +/- 1.50E+00	1.16E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.61 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.387 +/- 0.0148
SE-75	264.65	0.000 +/- 0.0000	0.488 +/- 0.0137
SE-75	279.53	0.000 +/- 0.0000	0.471 +/- 0.0193
SE-75	400.65	0.000 +/- 0.0000	0.584 +/- 0.0320

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
	1	31.89	7.00E-01	+/-	1.78E-01	1.87E+00	1.60E-08	+/-	1.05E-07
	2	50.17	1.70E+00	+/-	4.89E-01	1.58E+00	5.12E-06	+/-	1.36E-05
	3	60.22	5.77E+01	+/-	1.11E+00	1.53E+00	2.31E-05	+/-	3.89E-05
	4	104.24	8.45E+00	+/-	4.98E-01	1.43E+00	2.83E-04	+/-	5.28E-05
	5	116.51	1.90E+00	+/-	5.38E-01	1.42E+00	3.56E-04	+/-	2.80E-05
M	6	125.97	9.76E-01	+/-	1.57E-01	1.41E+00	4.03E-04	+/-	2.40E-05
m	7	130.02	9.31E+00	+/-	5.08E-01	1.41E+00	4.19E-04	+/-	2.78E-05
M	8	144.90	4.33E-01	+/-	3.18E-02	1.39E+00	4.65E-04	+/-	4.64E-05
m	9	149.40	2.47E-01	+/-	2.82E-02	1.39E+00	4.75E-04	+/-	5.09E-05
	10	196.18	4.38E-01	+/-	1.86E-01	1.35E+00	4.96E-04	+/-	5.85E-05
	11	208.69	2.59E+00	+/-	3.65E-01	1.34E+00	4.88E-04	+/-	5.34E-05
	12	255.85	3.04E-01	+/-	1.57E-01	1.30E+00	4.37E-04	+/-	3.13E-05
M	13	333.47	2.08E+00	+/-	2.17E-01	1.27E+00	3.53E-04	+/-	1.73E-05
m	14	336.42	6.93E-01	+/-	1.09E-01	1.26E+00	3.50E-04	+/-	1.73E-05
	15	345.67	2.64E+00	+/-	2.13E-01	1.26E+00	3.41E-04	+/-	1.75E-05
	16	369.04	7.36E-01	+/-	1.63E-01	1.24E+00	3.22E-04	+/-	1.83E-05
	17	375.71	3.96E+00	+/-	3.36E-01	1.24E+00	3.16E-04	+/-	1.85E-05
M	18	380.81	1.20E+00	+/-	1.50E-01	1.23E+00	3.12E-04	+/-	1.87E-05
m	19	383.42	1.11E+00	+/-	1.39E-01	1.23E+00	3.10E-04	+/-	1.88E-05
	20	393.53	2.04E+00	+/-	1.55E-01	1.22E+00	3.03E-04	+/-	1.90E-05
	21	413.70	5.52E+00	+/-	2.42E-01	1.22E+00	2.89E-04	+/-	1.94E-05
M	22	423.30	4.52E-01	+/-	1.03E-01	1.21E+00	2.83E-04	+/-	1.95E-05
m	23	427.03	1.02E-01	+/-	4.36E-02	1.21E+00	2.81E-04	+/-	1.95E-05
	24	452.14	7.46E-01	+/-	1.08E-01	1.21E+00	2.67E-04	+/-	1.94E-05
	25	662.42	1.71E-01	+/-	5.61E-02	1.17E+00	1.92E-04	+/-	1.21E-05
	26	722.01	7.89E-02	+/-	5.50E-02	1.16E+00	1.80E-04	+/-	1.01E-05
	27	964.13	3.51E-02	+/-	1.76E-02	1.14E+00	1.45E-04	+/-	6.45E-06
	28	1112.12	2.63E-02	+/-	1.52E-02	1.12E+00	1.30E-04	+/-	5.64E-06
	29	1174.20	1.14E-01	+/-	3.17E-02	1.12E+00	1.24E-04	+/-	5.36E-06
	30	2236.00	1.00E+02	+/-	1.51E+00	1.09E+00	5.36E-05	+/-	3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 113.81 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.291 +/- 0.0127
SE-75	264.65	0.000 +/- 0.0000	0.414 +/- 0.0122
SE-75	279.53	0.000 +/- 0.0000	0.406 +/- 0.0169
SE-75	400.65	0.000 +/- 0.0000	0.482 +/- 0.0288

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.96	2.81E-01 +/- 1.13E-01	2.19E+00	3.42E-06 +/- 2.07E-05
	2	50.42	3.81E+00 +/- 5.90E-01	1.79E+00	4.79E-05 +/- 1.16E-04
	3	60.21	5.55E+01 +/- 1.08E+00	1.71E+00	9.61E-05 +/- 1.50E-04
	4	104.21	5.35E+00 +/- 4.19E-01	1.58E+00	3.40E-04 +/- 5.99E-05
	5	111.87	1.32E+00 +/- 4.00E-01	1.57E+00	3.70E-04 +/- 3.89E-05
	6	116.60	8.67E-01 +/- 4.57E-01	1.56E+00	3.86E-04 +/- 2.94E-05
M	7	126.06	8.45E-01 +/- 1.41E-01	1.55E+00	4.12E-04 +/- 2.40E-05
m	8	130.05	7.47E+00 +/- 4.43E-01	1.55E+00	4.22E-04 +/- 2.69E-05
	9	180.20	7.55E-01 +/- 2.66E-01	1.47E+00	4.65E-04 +/- 5.40E-05
	10	208.68	2.15E+00 +/- 2.31E-01	1.43E+00	4.54E-04 +/- 4.70E-05
M	11	297.91	1.91E-01 +/- 6.69E-02	1.37E+00	3.83E-04 +/- 1.87E-05
m	12	303.62	1.12E-01 +/- 3.84E-02	1.36E+00	3.78E-04 +/- 1.80E-05
M	13	333.47	1.45E+00 +/- 1.82E-01	1.34E+00	3.54E-04 +/- 1.64E-05
m	14	336.30	6.10E-01 +/- 1.10E-01	1.34E+00	3.51E-04 +/- 1.64E-05
	15	345.69	1.11E+00 +/- 1.66E-01	1.34E+00	3.44E-04 +/- 1.65E-05
	16	375.68	2.81E+00 +/- 2.59E-01	1.32E+00	3.22E-04 +/- 1.72E-05
M	17	380.78	5.28E-01 +/- 1.02E-01	1.31E+00	3.19E-04 +/- 1.74E-05
m	18	383.34	5.87E-01 +/- 1.08E-01	1.31E+00	3.17E-04 +/- 1.74E-05
	19	393.59	1.24E+00 +/- 1.27E-01	1.31E+00	3.10E-04 +/- 1.77E-05
	20	413.70	3.47E+00 +/- 1.96E-01	1.30E+00	2.98E-04 +/- 1.80E-05
	21	423.06	2.30E-01 +/- 7.20E-02	1.30E+00	2.92E-04 +/- 1.81E-05
	22	452.15	3.99E-01 +/- 8.10E-02	1.29E+00	2.76E-04 +/- 1.81E-05
	23	511.62	2.34E-01 +/- 7.47E-02	1.27E+00	2.47E-04 +/- 1.68E-05
	24	662.42	1.01E-01 +/- 4.11E-02	1.23E+00	1.96E-04 +/- 1.14E-05
	25	867.39	3.46E-02 +/- 1.73E-02	1.20E+00	1.55E-04 +/- 7.11E-06
	26	964.13	3.59E-02 +/- 3.03E-02	1.19E+00	1.41E-04 +/- 6.33E-06
	27	1001.03	2.60E-02 +/- 1.50E-02	1.18E+00	1.37E-04 +/- 6.10E-06
	28	1333.45	1.44E-01 +/- 3.88E-02	1.15E+00	1.10E-04 +/- 5.75E-06
	29	1408.01	8.66E-03 +/- 8.66E-03	1.15E+00	1.05E-04 +/- 7.02E-06
	30	2236.00	1.00E+02 +/- 1.50E+00	1.12E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.04 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.276 +/- 0.0109
SE-75	264.65	0.000 +/- 0.0000	0.401 +/- 0.0118
SE-75	279.53	0.000 +/- 0.0000	0.384 +/- 0.0165
SE-75	400.65	0.000 +/- 0.0000	0.397 +/- 0.0264

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.96	2.32E-01 +/- 1.20E-01	2.25E+00	1.12E-09 +/- 7.11E-09
	2	50.40	1.86E+00 +/- 4.43E-01	1.83E+00	1.95E-06 +/- 4.99E-06
	3	60.22	4.18E+01 +/- 9.02E-01	1.75E+00	1.24E-05 +/- 2.04E-05
	4	95.34	8.99E-01 +/- 3.39E-01	1.63E+00	2.02E-04 +/- 6.28E-05
	5	99.49	1.15E+00 +/- 5.03E-01	1.62E+00	2.34E-04 +/- 5.73E-05
	6	103.91	1.50E+00 +/- 3.12E-01	1.61E+00	2.67E-04 +/- 4.98E-05
	7	111.72	5.20E-01 +/- 3.02E-01	1.60E+00	3.22E-04 +/- 3.50E-05
M	8	125.93	5.15E-01 +/- 1.05E-01	1.58E+00	4.05E-04 +/- 2.37E-05
m	9	129.99	4.75E+00 +/- 3.58E-01	1.57E+00	4.24E-04 +/- 2.75E-05
	10	208.66	7.13E-01 +/- 2.07E-01	1.45E+00	4.81E-04 +/- 5.23E-05
	11	333.35	3.68E-01 +/- 1.13E-01	1.40E+00	3.24E-04 +/- 1.53E-05
	12	345.71	3.01E-01 +/- 1.09E-01	1.40E+00	3.13E-04 +/- 1.53E-05
	13	375.78	7.84E-01 +/- 1.50E-01	1.39E+00	2.88E-04 +/- 1.59E-05
M	14	380.69	1.83E-01 +/- 6.18E-02	1.39E+00	2.84E-04 +/- 1.60E-05
m	15	383.41	2.43E-01 +/- 7.32E-02	1.39E+00	2.82E-04 +/- 1.60E-05
	16	393.40	4.50E-01 +/- 8.48E-02	1.39E+00	2.75E-04 +/- 1.62E-05
	17	413.70	1.08E+00 +/- 1.04E-01	1.39E+00	2.62E-04 +/- 1.65E-05
	18	452.37	8.00E-02 +/- 4.75E-02	1.37E+00	2.40E-04 +/- 1.65E-05
	19	1112.12	6.95E-02 +/- 2.46E-02	1.22E+00	1.18E-04 +/- 5.22E-06
	20	1334.05	8.69E-02 +/- 3.25E-02	1.20E+00	9.74E-05 +/- 5.42E-06
	21	2236.00	1.00E+02 +/- 1.50E+00	1.16E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.22 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.732 +/- 0.0205
SE-75	264.65	0.000 +/- 0.0000	0.813 +/- 0.0193
SE-75	279.53	0.000 +/- 0.0000	0.784 +/- 0.0246
SE-75	400.65	0.000 +/- 0.0000	0.887 +/- 0.0395

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	49.83	1.03E+00 +/- 3.75E-01	1.17E+00	3.00E-05 +/- 1.83E-05
	2	60.22	2.24E+01 +/- 6.00E-01	1.16E+00	5.63E-05 +/- 2.42E-05
	3	103.97	7.98E-01 +/- 2.38E-01	1.13E+00	1.80E-04 +/- 1.95E-05
M	4	126.00	3.02E-01 +/- 8.32E-02	1.13E+00	2.22E-04 +/- 1.49E-05
m	5	129.98	1.95E+00 +/- 2.26E-01	1.12E+00	2.28E-04 +/- 1.46E-05
	6	204.41	2.23E-01 +/- 1.35E-01	1.10E+00	2.63E-04 +/- 1.78E-05
	7	333.13	3.38E-01 +/- 9.18E-02	1.07E+00	2.12E-04 +/- 1.13E-05
	8	375.78	3.57E-01 +/- 1.02E-01	1.05E+00	1.94E-04 +/- 9.72E-06
	9	413.70	3.13E-01 +/- 7.77E-02	1.05E+00	1.79E-04 +/- 8.85E-06
	10	443.98	9.45E-02 +/- 4.91E-02	1.04E+00	1.68E-04 +/- 8.43E-06
	11	662.42	5.46E-02 +/- 3.44E-02	1.04E+00	1.15E-04 +/- 7.04E-06
	12	778.90	3.45E-02 +/- 1.73E-02	1.03E+00	9.86E-05 +/- 6.05E-06
	13	867.39	1.87E-02 +/- 1.71E-02	1.03E+00	8.96E-05 +/- 5.22E-06
	14	964.13	1.40E-02 +/- 1.61E-02	1.03E+00	8.21E-05 +/- 4.35E-06
	15	1112.12	3.85E-02 +/- 2.59E-02	1.03E+00	7.38E-05 +/- 3.43E-06
	16	1173.66	1.51E-01 +/- 4.15E-02	1.03E+00	7.13E-05 +/- 3.33E-06
	17	1333.53	1.38E-01 +/- 3.68E-02	1.02E+00	6.64E-05 +/- 4.06E-06
	18	2236.00	1.00E+02 +/- 1.49E+00	1.02E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85601657-R
Peak Locate Performed on: 8-21-07 3:56:39 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.55	0.2243	31.94	9.97
2	100.74	0.1966	50.04	10.15
3	121.10	0.0481	60.22	188.58
4	191.28	0.1224	95.31	30.97
5	199.46	0.0834	99.40	55.85
6	209.00	0.1092	104.17	33.73
7	224.19	0.1205	111.76	27.94
8	232.77	0.1485	116.05	11.49
9	260.78	0.0767	130.06	71.84
10	290.27	0.2439	144.80	8.65
11	299.25	0.2016	149.29	11.86
12	324.03	0.2407	161.68	6.06
13	393.31	0.2618	196.32	5.83
14	409.15	0.1312	204.24	24.50
15	418.05	0.1033	208.69	39.38
16	512.62	0.2663	255.98	5.58
17	596.99	0.2921	298.16	5.30
18	625.68	0.2611	312.51	6.17
19	667.56	0.1286	333.46	23.11
20	673.87	0.2265	336.38	9.86
21	684.87	0.2973	342.28	5.83
22	692.06	0.1252	345.72	26.23
23	752.09	0.0941	375.71	44.43
24	762.05	0.1735	380.86	15.07
25	767.83	0.1819	383.42	13.79
26	787.83	0.1287	393.58	22.76
27	829.48	0.0946	414.41	38.75
28	847.14	0.1843	423.23	11.46
29	905.01	0.1676	452.17	14.21
30	1023.64	0.2093	511.49	6.07
31	1118.69	0.2599	559.01	5.27
32	1326.69	0.2419	663.01	6.00
33	2348.49	0.2152	1173.91	6.63
34	2667.76	0.1955	1333.55	8.10
35	2924.06	0.2304	1461.70	5.94
36	4471.94	0.0263	2235.64	412.11

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85601657-R
Peak Analysis Performed on: 8-21-07 3:56:39 PM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	61-	67	64.55	31.94	3.07E+02	40.42	5.64E+02
	2	94-	105	100.74	50.04	2.87E+03	190.00	1.25E+04
	3	114-	127	121.10	60.22	6.58E+04	320.23	1.32E+04
	4	184-	194	191.28	95.31	2.40E+02	161.45	1.03E+04
	5	194-	206	199.46	99.40	6.68E+02	240.40	2.14E+04
	6	206-	215	209.00	104.17	4.76E+03	143.28	6.45E+03
	7	217-	228	224.19	111.76	8.91E+02	146.55	7.99E+03
	8	228-	239	232.77	116.05	1.03E+03	153.55	8.36E+03
	9	256-	267	260.78	130.06	8.58E+03	140.24	4.37E+03
	10	283-	295	290.27	144.80	1.44E+02	100.89	3.76E+03
	11	295-	303	299.25	149.29	2.50E+02	77.26	2.67E+03
	12	317-	327	324.03	161.68	4.40E+02	81.70	2.61E+03
	13	386-	400	393.31	196.32	3.01E+02	89.68	2.69E+03
	14	406-	413	409.15	204.24	5.02E+02	72.52	2.17E+03
	15	413-	425	418.05	208.69	1.43E+03	104.81	3.39E+03
	16	508-	519	512.62	255.98	1.23E+02	55.22	1.17E+03
	17	589-	604	596.99	298.16	1.36E+02	58.86	1.11E+03
	18	622-	631	625.68	312.51	1.18E+02	40.36	6.68E+02
M	19	660-	681	667.59	333.46	1.21E+03	60.47	5.26E+02
m	20	660-	681	673.42	336.38	3.52E+02	29.34	6.01E+02
M	21	681-	699	685.22	342.28	1.42E+02	20.27	4.50E+02
m	22	681-	699	692.11	345.72	1.24E+03	60.22	3.49E+02
	23	746-	759	752.09	375.71	2.32E+03	83.97	1.56E+03
M	24	759-	775	762.39	380.86	5.48E+02	37.30	3.46E+02
m	25	759-	775	767.52	383.42	5.70E+02	37.09	2.92E+02
	26	780-	795	787.83	393.58	1.09E+03	47.20	3.78E+02
	27	821-	837	829.48	414.41	2.87E+03	62.19	3.21E+02
	28	843-	852	847.14	423.23	1.69E+02	26.44	2.29E+02
	29	899-	912	905.01	452.17	3.64E+02	29.49	1.81E+02
	30	1015-	1031	1023.64	511.49	3.24E+02	29.58	1.75E+02
	31	1113-	1122	1118.69	559.01	5.62E+01	15.58	8.18E+01
	32	1322-	1330	1326.69	663.01	7.13E+01	14.93	7.07E+01
	33	2343-	2357	2348.49	1173.91	1.05E+02	14.69	3.67E+01
	34	2658-	2674	2667.76	1333.55	1.35E+02	15.69	3.55E+01
	35	2920-	2933	2924.06	1461.70	5.26E+01	12.63	3.74E+01
	36	4465-	4482	4471.94	2235.64	1.85E+05	430.32	1.00E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85601657-R
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.991	2236.00*	100.00	7.754E+02	1.809E+02
Np-237	0.741	300.10	6.63		
		311.90*	38.60	3.038E-01	1.038E-01
Pu-239	0.965	413.70*	0.00	2.327E+05	6.658E+03
Pu-239A	0.959	129.29*	0.01	1.411E+05	4.099E+03
Am-241	0.976	662.42*	0.00	3.113E+04	6.525E+03
Pu-241	0.963	148.57*	0.00	1.234E+05	3.815E+04

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-21-07 3:56:39 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	31.94	2.6639E+00	13.19
2	50.04	2.4951E+01	6.62
3	60.22	5.7160E+02	0.55
4	95.31	2.0842E+00	67.31
5	99.40	5.8039E+00	35.99
6	104.17	4.1335E+01	3.02
7	111.76	7.7442E+00	16.45
8	116.05	8.9753E+00	14.87
10	144.80	1.2524E+00	70.00
12	161.68	3.8273E+00	18.55
13	196.32	2.6131E+00	29.82
14	204.24	4.3634E+00	14.44
15	208.69	1.2451E+01	7.32
16	255.98	1.0672E+00	44.97
17	298.16	1.1803E+00	43.34
M 19	333.46	1.0545E+01	4.99
m 20	336.38	3.0552E+00	8.35
M 21	342.28	1.2380E+00	14.23
m 22	345.72	1.0801E+01	4.85
23	375.71	2.0158E+01	3.63
M 24	380.86	4.7621E+00	6.81
m 25	383.42	4.9517E+00	6.51
26	393.58	9.4982E+00	4.33
28	423.23	1.4664E+00	15.67
29	452.17	3.1600E+00	8.11
30	511.49	2.8190E+00	9.12
31	559.01	4.8859E-01	27.70
33	1173.91	9.1484E-01	13.95
34	1333.55	1.1770E+00	11.58
35	1461.70	4.5740E-01	23.99

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.58E+02	+/-	1.27E+02		2.20E-02	+/-	3.27E-03
SE-75	<	7.99E-02	+/-	5.24E-03	<	2.05E-06	+/-	1.35E-07
EU-152x	<	2.31E-01	+/-	1.74E-02	<	5.93E-06	+/-	4.46E-07
U-233	<	4.44E+03	+/-	3.54E+02	<	1.14E-01	+/-	9.08E-03
U-235	<	1.04E-01	+/-	1.28E-02	<	2.66E-06	+/-	3.29E-07
Np-237		2.08E-01	+/-	5.40E-02		5.33E-06	+/-	1.39E-06
Pu-238		1.90E+03	+/-	1.12E+03		4.88E-02	+/-	2.87E-02
U-238		3.06E+00	+/-	1.10E+00		7.86E-05	+/-	2.82E-05
Pu-239		2.13E+05	+/-	6.41E+03		5.46E+00	+/-	1.65E-01
Pu-239A		1.40E+05	+/-	3.53E+03		3.58E+00	+/-	9.06E-02
Am-241		2.76E+04	+/-	4.88E+03		7.09E-01	+/-	1.25E-01
Am-241D		1.32E+04	+/-	6.40E+03		3.39E-01	+/-	1.64E-01
Pu-241		7.89E+04	+/-	1.82E+04		2.03E+00	+/-	4.68E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	2.95E-04	+/-	7.67E-05
Pu-238	1.11E-04	+/-	6.54E-05
U-238	9.13E+00	+/-	3.27E+00
Pu-239	3.43E+00	+/-	1.03E-01
Pu-239A	2.25E+00	+/-	5.68E-02
Am-241	8.07E-03	+/-	1.42E-03
Pu-241	7.63E-04	+/-	1.76E-04

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.75E+02	+/-	1.81E+02		1.99E-02	+/-	4.64E-03
SE-75	<	3.45E-01	+/-	3.20E-03	<	8.87E-06	+/-	8.22E-08
EU-152x	<	6.00E-01	+/-	1.10E-02	<	1.54E-05	+/-	2.84E-07
U-233	<	2.40E+04	+/-	5.22E+02	<	6.15E-01	+/-	1.34E-02
U-235	<	4.78E-01	+/-	1.10E-02	<	1.23E-05	+/-	2.82E-07
Np-237		3.04E-01	+/-	1.04E-01		7.80E-06	+/-	2.67E-06
Pu-238	<	3.63E+04	+/-	6.99E+02	<	9.33E-01	+/-	1.79E-02
U-238	<	1.59E+01	+/-	2.53E-01	<	4.09E-04	+/-	6.51E-06
Pu-239		2.33E+05	+/-	6.66E+03		5.97E+00	+/-	1.71E-01
Pu-239A		1.41E+05	+/-	4.10E+03		3.62E+00	+/-	1.05E-01
Am-241		3.11E+04	+/-	6.53E+03		7.99E-01	+/-	1.68E-01
Am-241D	<	7.35E+04	+/-	7.03E+02	<	1.89E+00	+/-	1.81E-02
Pu-241		1.23E+05	+/-	3.82E+04		3.17E+00	+/-	9.80E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	4.31E-04	+/-	1.47E-04
Pu-239	3.75E+00	+/-	1.07E-01
Pu-239A	2.27E+00	+/-	6.60E-02
Am-241	9.09E-03	+/-	1.91E-03
Pu-241	1.19E-03	+/-	3.69E-04

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.000	+/-	0.0000
Matrix Longitudinal Ratio:	0.976	+/-	0.6966
Source Vertical Ratio:	0.000	+/-	0.0000
Matrix Vertical Ratio:	0.951	+/-	0.0902

NUDS could not find the transmission peak in one radial segment.
NUDS could not find the source peak in any radial segment.

Radioassay Data Sheet — Thu Aug 30 03:08:38 2007

Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: LL85501375	Gross Weight (kg)	: 103.8
Sequence Number	: 2379	Fill Height (%)	: 100.0
Assay Date	: 08/21/07 16:20:26	Density (g/cc)	: 0.35
		Net Weight (kg)	: 73.70
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	4.65e-06	+/-	7.41e-07 Ci/g
Total Pu-239 Equiv Activity:	3.55e-01	+/-	5.47e-02 Ci
Total Pu-239 Fissile Gram Equiv:	3.52e+00	+/-	8.10e-01 g
Decay Heat:	1.10e-02	+/-	1.73e-03 W
Total Pu Mass:	3.69e+00	+/-	8.12e-01 g
TMU:	23.81%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	2.39e-02	8.54e+00
Pu-239	9.21e+01	1.96e-01
Pu-240	7.65e+00	2.35e+00
Pu-241	1.87e-01	2.20e+00
Pu-242	3.65e-02	1.10e+01
Am-241	3.35e-01	1.78e+00
Am-243	1.79e-04	4.99e+00
Np-237	0.00e+00	0.00e+00
U-235	2.57e+00	2.30e+01

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	8.83e-04	2.23e-04	1.51e-02	3.82e-03	4.57e-04
Pu-239	3.40e+00	8.09e-01	2.11e-01	5.02e-02	7.84e-02
Pu-240	2.82e-01	6.75e-02	6.40e-02	1.53e-02	0.00e+00
Pu-241	6.89e-03	1.65e-03	7.13e-01	1.70e-01	9.86e-04
Pu-242	1.35e-03	3.54e-04	5.29e-06	1.39e-06	0.00e+00
Am-241	1.53e-02	4.29e-03	5.25e-02	1.47e-02	4.19e-03
Am-243	6.61e-06	1.61e-06	1.32e-06	3.21e-07	0.00e+00
Np-237	1.96e-03	5.08e-04	1.38e-06	3.58e-07	3.12e-04
U-235	9.50e-02	3.14e-02	2.05e-07	6.80e-08	5.69e-02
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.75e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	5.39e-01
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Robert J Haslett Jr — 8-30-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85501375
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2379
Assayed on: 08/21/07 16:20:26
Report Generated: 08/30/07 15:08:23
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

REVIEW Pu-240 Wt Pct -2 Sigma error <7.29> greater than <5.87> Review MGA R OK
Pu-240 Wt Pct error <2.35> is within limits
Pu-238 Wt Pct error <8.54> is within limits
QFIT <1.15> is within limits
REVIEW MGAERR12: Calculations in MGAABS didn't converge: MGA results may be suspect OK

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.354> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.12e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.67> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <0.72> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <0.77> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <1.11> is acceptable in Segment 4
Pulser value <0.99> is within range in Segment 4
DEAD TIME percentage <1.25> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <0.82> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <0.78> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <0.85> is acceptable in Segment 8
Pulser value <0.99> is within range in Segment 8
DEAD TIME percentage <0.83> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <0.83> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <0.85> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <0.92> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <0.85> is acceptable in Segment 13
Pulser value <1.00> is within range in Segment 13
DEAD TIME percentage <0.73> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.63> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15

DEAD TIME percentage <0.58> is acceptable in Segment 16
Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 2 OK
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
Transmission results are acceptable in Segment 5
Transmission results are acceptable in Segment 6
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 7 OK
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 13 OK
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 14 OK
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

All energy peaks within <3.00e+00> RCHISQ limit

Section 7 - FGE MASS REVIEW

FGE Mass <4.33> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <221.38> is above lower limit <200.00> OK
Np-237 ratio <1732.52> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <3.40> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed OK. Checked

Independent Reviewer: Robert J Hackett Jr Date: 8-30-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85501375
Item Description Code:
Sequence Number: 2379
Assayed on: 08/21/07 16:20:26
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA	
Pu-240 Wt Pct -2 Sigma error is greater than upper limit.	OK
MGAERR12	OK
SECTION 5 - TRANSMISSION	
Low Transmission Line 136.0 less than 0.001 found in Segment 2	OK. Ratio 129/413 Ok.
Low Transmission Line 136.0 less than 0.001 found in Segment 7	
Low Transmission Line 136.0 less than 0.001 found in Segment 13	
Low Transmission Line 136.0 less than 0.001 found in Segment 14	
SECTION 9 - IDC COUNT TYPE	
IDC is not available.	N/A

Technical Reviewer: Robert J Hazlitt Date: 8-30-07

```
*********************************************************************
*****                    M G A   R E P O R T                    *****
*********************************************************************
```

Report generated on: 8-30-07 2:29:52 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202379.CNF Sens : 30.0% LT: 55.6 Mins DT: 0.62
Measurement date: 8-21-07 Declared date: 8-21-07

Sample ID: LL85501375 Detector: Total counts: 6.815E+05

Pu g/cm2 = 0.0561 Cd g/cm2 = 1.6000 FWHM at 122 keV = 649 eV
QFIT = 1.15 FWHM at 208 keV = 830 eV
NQFIT = 1.01

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000260	8.6	8.5	0.1280	8.5	0.02392	8.54	0.02392	8.54
Pu-239	1.000000	0.0	1.3	492.9249	2.3	92.10420	0.20	92.10420	0.20
Pu-240	0.083041	2.5	2.3	40.9332	2.9	7.64846	2.35	7.64846	2.35
Pu-241	0.002029	2.2	1.9	1.0000	0.0	0.18685	2.20	0.18685	2.20
Pu-242	(New alg.	)		0.1956	(11)	0.03655	(11)	0.03655	(11)
Am-241	0.003636	1.9	1.4	1.7921	2.3	0.33486	1.78	0.33486	1.78
Am-243	(Np-239)					0.00018	4.99		
U-235	0.027957	22.9	23.0			2.57500	22.97	2.57500	22.97

Pu-240 effective (meas. date) = 7.770 +/- 2.61%
Am-241 separated about 21.326 +/- 0.507 years ago
Am/Pu-241 weight ratio = 1.79213 +/- 2.42%

Messages :

Lead x-rays detected.
Calculations in MGAABS didn't converge : results may be suspect.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102379.S11
Sample ID: LL85501375 Count Sequence Number: 2379
Assay Start: 8-21-07 4:20:28 PM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 103800. g Net: 73700.0 g
Density: 0.354 g /ml

Container Type: 55 Gal Galv 66.3
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv 66.3
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 3:44:55 PM 72717

Reviewed by: Robert J. Hazlitt Jr. Date: 8-30-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.23 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.020 +/- 0.0029
SE-75	279.53	0.000 +/- 0.0000	0.038 +/- 0.0057
SE-75	400.65	0.000 +/- 0.0000	0.044 +/- 0.0086

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.20	1.42E+01 +/- 4.78E-01	4.10E+00	6.37E-06 +/- 1.17E-05
2	75.56	4.26E-01 +/- 1.30E-01	4.10E+00	3.86E-05 +/- 3.57E-05
3	99.41	1.39E+00 +/- 2.38E-01	4.10E+00	1.52E-04 +/- 4.17E-05
4	129.29	1.58E+00 +/- 1.98E-01	4.10E+00	3.01E-04 +/- 2.13E-05
5	148.57	5.48E-01 +/- 1.97E-01	3.96E+00	3.59E-04 +/- 4.14E-05
6	208.67	5.18E-01 +/- 1.56E-01	3.47E+00	3.80E-04 +/- 4.53E-05
7	228.79	3.14E-01 +/- 9.23E-02	3.33E+00	3.62E-04 +/- 3.68E-05
8	279.54	5.25E-01 +/- 1.06E-01	2.71E+00	3.08E-04 +/- 1.90E-05
9	311.90	3.21E-01 +/- 1.04E-01	2.68E+00	2.76E-04 +/- 1.41E-05
10	333.44	4.49E-01 +/- 7.87E-02	2.66E+00	2.57E-04 +/- 1.33E-05
11	345.69	1.81E-01 +/- 8.46E-02	2.65E+00	2.47E-04 +/- 1.34E-05
12	375.90	4.11E-01 +/- 8.00E-02	2.63E+00	2.25E-04 +/- 1.40E-05
13	393.87	1.46E-01 +/- 4.96E-02	2.62E+00	2.14E-04 +/- 1.43E-05
14	413.70	4.23E-01 +/- 8.22E-02	2.59E+00	2.03E-04 +/- 1.44E-05
15	443.98	7.34E-02 +/- 3.25E-02	2.53E+00	1.88E-04 +/- 1.44E-05
16	662.42	8.48E-02 +/- 4.00E-02	2.20E+00	1.27E-04 +/- 8.85E-06
17	722.01	8.64E-03 +/- 8.64E-03	2.14E+00	1.18E-04 +/- 7.51E-06
18	2236.00	1.00E+02 +/- 1.50E+00	1.59E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 114.17 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.045 +/- 0.0037
SE-75	279.53	0.000 +/- 0.0000	0.072 +/- 0.0075
SE-75	400.65	0.000 +/- 0.0000	0.071 +/- 0.0119

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.04	2.66E-01 +/- 1.12E-01	4.10E+00	1.88E-05 +/- 1.17E-04
2	50.09	1.60E+00 +/- 3.69E-01	4.01E+00	8.37E-05 +/- 2.13E-04
3	60.21	1.78E+01 +/- 5.45E-01	3.69E+00	1.33E-04 +/- 2.14E-04
4	99.35	1.28E+00 +/- 2.97E-01	3.20E+00	3.09E-04 +/- 7.52E-05
5	129.29	2.22E+00 +/- 2.31E-01	3.03E+00	3.88E-04 +/- 2.47E-05
6	208.86	8.00E-01 +/- 1.90E-01	2.76E+00	4.25E-04 +/- 4.48E-05
7	228.75	4.67E-01 +/- 1.05E-01	2.70E+00	4.16E-04 +/- 3.76E-05
8	279.54	7.48E-01 +/- 1.15E-01	2.31E+00	3.82E-04 +/- 2.14E-05
9	311.90	3.11E-01 +/- 1.04E-01	2.30E+00	3.58E-04 +/- 1.69E-05
10	333.37	2.84E-01 +/- 9.17E-02	2.31E+00	3.42E-04 +/- 1.64E-05
11	345.77	2.00E-01 +/- 1.03E-01	2.31E+00	3.34E-04 +/- 1.66E-05
12	369.12	8.32E-02 +/- 5.45E-02	2.31E+00	3.17E-04 +/- 1.73E-05
13	375.67	4.28E-01 +/- 1.04E-01	2.31E+00	3.13E-04 +/- 1.75E-05
14	393.42	2.11E-01 +/- 6.22E-02	2.32E+00	3.02E-04 +/- 1.81E-05
15	413.70	4.90E-01 +/- 8.67E-02	2.30E+00	2.89E-04 +/- 1.85E-05
16	559.71	5.72E-02 +/- 3.06E-02	2.09E+00	2.19E-04 +/- 1.55E-05
17	662.42	1.38E-01 +/- 3.46E-02	1.98E+00	1.86E-04 +/- 1.15E-05
18	722.01	6.25E-02 +/- 3.81E-02	1.93E+00	1.71E-04 +/- 9.64E-06
19	778.90	1.73E-02 +/- 1.22E-02	1.89E+00	1.59E-04 +/- 8.28E-06
20	1085.91	2.59E-02 +/- 1.50E-02	1.71E+00	1.20E-04 +/- 5.31E-06
21	2236.00	1.00E+02 +/- 1.50E+00	1.49E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 114.11 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.029 +/- 0.0055
SE-75	264.65	0.000 +/- 0.0000	0.067 +/- 0.0046
SE-75	279.53	0.000 +/- 0.0000	0.092 +/- 0.0089
SE-75	400.65	0.000 +/- 0.0000	0.120 +/- 0.0159

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.12	3.87E-01 +/- 1.31E-01	4.10E+00	3.50E-06 +/- 3.34E-06
	2	60.23	1.87E+01 +/- 5.90E-01	3.54E+00	8.10E-05 +/- 2.79E-05
	3	99.34	1.72E+00 +/- 3.14E-01	3.07E+00	2.97E-04 +/- 3.03E-05
M	4	111.88	8.65E-01 +/- 1.87E-01	3.00E+00	3.55E-04 +/- 2.59E-05
m	5	114.98	6.90E-01 +/- 1.60E-01	2.99E+00	3.68E-04 +/- 2.50E-05
M	6	126.06	3.32E-01 +/- 1.05E-01	2.93E+00	4.08E-04 +/- 2.26E-05
m	7	130.06	2.95E+00 +/- 3.06E-01	2.92E+00	4.20E-04 +/- 2.22E-05
	8	208.86	1.07E+00 +/- 2.25E-01	2.55E+00	4.91E-04 +/- 2.59E-05
	9	228.89	8.50E-01 +/- 1.81E-01	2.48E+00	4.80E-04 +/- 2.49E-05
	10	264.66	1.93E-01 +/- 1.06E-01	2.36E+00	4.50E-04 +/- 2.20E-05
	11	279.54	1.06E+00 +/- 1.36E-01	2.17E+00	4.36E-04 +/- 2.07E-05
	12	311.90	2.77E-01 +/- 1.33E-01	2.12E+00	4.04E-04 +/- 1.79E-05
	13	333.85	5.78E-01 +/- 1.23E-01	2.09E+00	3.83E-04 +/- 1.63E-05
	14	345.84	2.16E-01 +/- 7.72E-02	2.08E+00	3.72E-04 +/- 1.56E-05
	15	375.85	7.09E-01 +/- 1.41E-01	2.04E+00	3.46E-04 +/- 1.41E-05
	16	393.59	4.20E-01 +/- 7.89E-02	2.02E+00	3.31E-04 +/- 1.34E-05
	17	413.70	7.53E-01 +/- 1.02E-01	2.00E+00	3.16E-04 +/- 1.28E-05
	18	452.34	1.37E-01 +/- 5.85E-02	1.95E+00	2.89E-04 +/- 1.20E-05
	19	778.90	1.94E-02 +/- 1.80E-02	1.69E+00	1.66E-04 +/- 8.11E-06
	20	1408.01	1.73E-02 +/- 1.22E-02	1.47E+00	1.15E-04 +/- 7.14E-06
	21	2236.00	1.00E+02 +/- 1.49E+00	1.38E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 113.72 sec Elapsed Real Time: 115.00 sec

Instrument ID: SGS Can ID: LL85501375 Count Sequence #: 2379

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.021 +/- 0.0038
SE-75	264.65	0.000 +/- 0.0000	0.075 +/- 0.0051
SE-75	279.53	0.000 +/- 0.0000	0.108 +/- 0.0101
SE-75	400.65	0.000 +/- 0.0000	0.117 +/- 0.0150

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	60.21	4.85E+01 +/- 1.01E+00	3.81E+00	3.63E-05 +/- 5.77E-05
	2	99.32	5.91E+00 +/- 5.77E-01	3.30E+00	2.64E-04 +/- 6.35E-05
	3	115.47	1.43E+00 +/- 4.68E-01	3.19E+00	3.54E-04 +/- 2.95E-05
M	4	125.93	9.93E-01 +/- 1.50E-01	3.14E+00	3.99E-04 +/- 2.37E-05
m	5	130.04	9.46E+00 +/- 4.99E-01	3.12E+00	4.14E-04 +/- 2.68E-05
	6	148.57	6.43E-01 +/- 2.54E-01	2.97E+00	4.63E-04 +/- 4.66E-05
	7	204.22	1.11E+00 +/- 2.19E-01	2.58E+00	4.83E-04 +/- 5.22E-05
	8	208.69	2.20E+00 +/- 3.78E-01	2.55E+00	4.80E-04 +/- 5.05E-05
	9	228.80	7.75E-01 +/- 2.28E-01	2.45E+00	4.64E-04 +/- 4.19E-05
	10	279.54	1.14E+00 +/- 1.62E-01	2.07E+00	4.11E-04 +/- 2.31E-05
	11	300.10	2.75E-01 +/- 1.59E-01	2.06E+00	3.89E-04 +/- 1.89E-05
	12	311.90	4.49E-01 +/- 1.50E-01	2.06E+00	3.77E-04 +/- 1.75E-05
	13	333.64	2.03E+00 +/- 1.90E-01	2.05E+00	3.57E-04 +/- 1.65E-05
	14	345.69	9.32E-01 +/- 1.48E-01	2.04E+00	3.46E-04 +/- 1.65E-05
	15	375.67	3.18E+00 +/- 2.01E-01	2.03E+00	3.21E-04 +/- 1.71E-05
	16	393.70	1.30E+00 +/- 1.47E-01	2.03E+00	3.07E-04 +/- 1.75E-05
	17	413.70	3.11E+00 +/- 1.85E-01	2.01E+00	2.94E-04 +/- 1.78E-05
	18	452.00	2.79E-01 +/- 8.56E-02	1.96E+00	2.70E-04 +/- 1.78E-05
	19	511.71	2.30E-01 +/- 5.80E-02	1.90E+00	2.40E-04 +/- 1.65E-05
	20	662.42	7.83E-02 +/- 5.13E-02	1.77E+00	1.90E-04 +/- 1.13E-05
	21	1112.12	2.03E-02 +/- 1.86E-02	1.55E+00	1.26E-04 +/- 5.66E-06
	22	2236.00	1.00E+02 +/- 1.50E+00	1.39E+00	7.00E-05 +/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 113.56 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.027 +/- 0.0052
SE-75	264.65	0.000 +/- 0.0000	0.089 +/- 0.0058
SE-75	279.53	0.000 +/- 0.0000	0.143 +/- 0.0112
SE-75	400.65	0.000 +/- 0.0000	0.128 +/- 0.0168

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.43	6.34E-01 +/- 1.67E-01	4.10E+00	3.18E-07 +/- 2.06E-06
	2	60.21	6.99E+01 +/- 1.28E+00	3.61E+00	4.81E-05 +/- 8.24E-05
	3	99.36	1.68E+00 +/- 8.18E-01	3.13E+00	2.78E-04 +/- 7.10E-05
	4	104.19	6.29E+00 +/- 4.97E-01	3.10E+00	3.04E-04 +/- 5.76E-05
	5	115.82	1.32E+00 +/- 5.17E-01	3.04E+00	3.59E-04 +/- 2.97E-05
M	6	125.89	1.01E+00 +/- 1.56E-01	2.99E+00	3.97E-04 +/- 2.36E-05
m	7	130.05	1.30E+01 +/- 5.80E-01	2.97E+00	4.09E-04 +/- 2.73E-05
	8	148.57	4.97E-01 +/- 2.74E-01	2.83E+00	4.48E-04 +/- 4.84E-05
	9	172.06	8.05E-01 +/- 2.47E-01	2.65E+00	4.67E-04 +/- 5.93E-05
	10	196.29	4.61E-01 +/- 2.58E-01	2.50E+00	4.63E-04 +/- 5.58E-05
	11	208.69	3.81E+00 +/- 3.56E-01	2.44E+00	4.56E-04 +/- 5.12E-05
	12	228.80	7.91E-01 +/- 1.67E-01	2.34E+00	4.40E-04 +/- 4.22E-05
	13	279.54	7.41E-01 +/- 1.67E-01	1.92E+00	3.92E-04 +/- 2.28E-05
	14	298.13	4.27E-01 +/- 1.74E-01	1.92E+00	3.74E-04 +/- 1.90E-05
	15	311.90	2.80E-01 +/- 1.51E-01	1.93E+00	3.62E-04 +/- 1.74E-05
M	16	333.53	1.74E+00 +/- 1.99E-01	1.93E+00	3.43E-04 +/- 1.67E-05
m	17	336.42	4.78E-01 +/- 9.27E-02	1.94E+00	3.41E-04 +/- 1.67E-05
	18	345.63	1.20E+00 +/- 1.69E-01	1.94E+00	3.33E-04 +/- 1.69E-05
	19	368.75	7.73E-01 +/- 1.52E-01	1.95E+00	3.16E-04 +/- 1.76E-05
	20	375.68	2.71E+00 +/- 2.70E-01	1.96E+00	3.11E-04 +/- 1.79E-05
M	21	380.91	7.40E-01 +/- 1.19E-01	1.96E+00	3.07E-04 +/- 1.81E-05
m	22	383.48	7.12E-01 +/- 1.11E-01	1.96E+00	3.06E-04 +/- 1.82E-05
	23	393.73	1.62E+00 +/- 1.48E-01	1.97E+00	2.99E-04 +/- 1.85E-05
	24	413.70	3.69E+00 +/- 1.93E-01	1.96E+00	2.86E-04 +/- 1.90E-05
	25	423.17	2.68E-01 +/- 7.33E-02	1.95E+00	2.81E-04 +/- 1.91E-05
	26	443.98	5.66E-02 +/- 4.28E-02	1.92E+00	2.69E-04 +/- 1.92E-05
	27	452.07	4.46E-01 +/- 8.58E-02	1.92E+00	2.65E-04 +/- 1.91E-05
	28	511.88	2.27E-01 +/- 5.96E-02	1.85E+00	2.37E-04 +/- 1.79E-05
	29	662.42	1.07E-01 +/- 4.30E-02	1.73E+00	1.90E-04 +/- 1.21E-05
	30	722.01	6.84E-02 +/- 4.06E-02	1.69E+00	1.77E-04 +/- 1.01E-05
	31	778.90	2.61E-02 +/- 1.51E-02	1.66E+00	1.66E-04 +/- 8.62E-06
	32	2236.00	1.00E+02 +/- 1.50E+00	1.37E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Instrument ID: SGS Can ID: LL85501375 Count Sequence #: 2379

Elapsed Live Time: 114.06 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.026 +/- 0.0050
SE-75	264.65	0.000 +/- 0.0000	0.091 +/- 0.0053
SE-75	279.53	0.000 +/- 0.0000	0.137 +/- 0.0103
SE-75	400.65	0.000 +/- 0.0000	0.122 +/- 0.0180

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	49.79	1.55E+00 +/- 4.55E-01	3.94E+00	2.10E-05 +/- 5.49E-05
	2	60.21	2.41E+01 +/- 6.79E-01	3.62E+00	6.10E-05 +/- 9.95E-05
	3	99.42	2.53E+00 +/- 3.75E-01	3.14E+00	3.06E-04 +/- 7.48E-05
M	4	104.46	5.90E-01 +/- 4.48E-02	3.11E+00	3.34E-04 +/- 5.97E-05
m	5	106.94	6.72E-01 +/- 4.01E-02	3.09E+00	3.46E-04 +/- 5.25E-05
M	6	111.89	5.82E-01 +/- 1.82E-01	3.07E+00	3.69E-04 +/- 3.95E-05
m	7	115.33	7.44E-01 +/- 2.02E-01	3.05E+00	3.84E-04 +/- 3.20E-05
M	8	126.08	4.75E-01 +/- 1.17E-01	3.00E+00	4.22E-04 +/- 2.47E-05
m	9	130.04	3.70E+00 +/- 3.40E-01	2.98E+00	4.33E-04 +/- 2.81E-05
	10	208.71	1.64E+00 +/- 2.30E-01	2.43E+00	4.72E-04 +/- 5.09E-05
	11	228.85	1.28E+00 +/- 1.82E-01	2.32E+00	4.57E-04 +/- 4.22E-05
	12	279.54	1.02E+00 +/- 1.39E-01	1.94E+00	4.11E-04 +/- 2.35E-05
	13	300.10	3.52E-01 +/- 1.29E-01	1.95E+00	3.93E-04 +/- 1.94E-05
	14	333.55	8.36E-01 +/- 1.22E-01	1.96E+00	3.65E-04 +/- 1.73E-05
	15	345.64	3.03E-01 +/- 1.02E-01	1.97E+00	3.55E-04 +/- 1.74E-05
	16	375.78	8.84E-01 +/- 1.54E-01	1.99E+00	3.33E-04 +/- 1.84E-05
	17	393.73	3.74E-01 +/- 9.31E-02	2.00E+00	3.22E-04 +/- 1.90E-05
	18	413.70	8.12E-01 +/- 1.02E-01	1.99E+00	3.09E-04 +/- 1.95E-05
	19	423.51	1.22E-01 +/- 5.24E-02	1.98E+00	3.04E-04 +/- 1.96E-05
	20	662.42	6.28E-02 +/- 3.23E-02	1.75E+00	2.10E-04 +/- 1.26E-05
	21	722.01	6.28E-02 +/- 3.30E-02	1.71E+00	1.95E-04 +/- 1.05E-05
	22	1085.91	2.76E-02 +/- 1.90E-02	1.55E+00	1.34E-04 +/- 5.68E-06
	23	2236.00	1.00E+02 +/- 1.50E+00	1.38E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 114.10 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.050 +/- 0.0039
SE-75	279.53	0.000 +/- 0.0000	0.067 +/- 0.0081
SE-75	400.65	0.000 +/- 0.0000	0.068 +/- 0.0107

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	60.22	3.24E+01 +/- 7.70E-01	3.56E+00	1.61E-05 +/- 2.40E-05
	2	99.37	1.39E+00 +/- 3.27E-01	3.09E+00	2.43E-04 +/- 5.52E-05
M	3	126.17	3.25E-01 +/- 9.93E-02	2.95E+00	4.25E-04 +/- 2.47E-05
m	4	130.05	3.44E+00 +/- 3.18E-01	2.94E+00	4.45E-04 +/- 2.78E-05
	5	208.69	1.27E+00 +/- 2.14E-01	2.68E+00	5.47E-04 +/- 5.32E-05
	6	228.72	4.38E-01 +/- 1.29E-01	2.62E+00	5.26E-04 +/- 4.39E-05
	7	279.54	4.37E-01 +/- 1.11E-01	2.35E+00	4.58E-04 +/- 2.40E-05
	8	311.90	1.51E-01 +/- 1.01E-01	2.35E+00	4.17E-04 +/- 1.86E-05
	9	333.61	3.88E-01 +/- 1.20E-01	2.34E+00	3.91E-04 +/- 1.76E-05
	10	345.56	2.21E-01 +/- 7.09E-02	2.34E+00	3.78E-04 +/- 1.76E-05
	11	369.39	1.44E-01 +/- 8.77E-02	2.34E+00	3.54E-04 +/- 1.81E-05
	12	375.85	5.82E-01 +/- 1.10E-01	2.34E+00	3.48E-04 +/- 1.82E-05
	13	393.62	2.84E-01 +/- 7.38E-02	2.35E+00	3.33E-04 +/- 1.86E-05
	14	413.70	6.33E-01 +/- 9.14E-02	2.33E+00	3.17E-04 +/- 1.88E-05
	15	452.29	5.96E-02 +/- 4.34E-02	2.26E+00	2.90E-04 +/- 1.86E-05
	16	662.42	6.31E-02 +/- 3.00E-02	2.00E+00	2.03E-04 +/- 1.17E-05
	17	722.01	6.91E-02 +/- 2.45E-02	1.95E+00	1.89E-04 +/- 9.99E-06
	18	1085.91	2.48E-02 +/- 2.10E-02	1.73E+00	1.35E-04 +/- 5.76E-06
	19	2236.00	1.00E+02 +/- 1.50E+00	1.50E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 114.02 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.526 +/- 0.0173
SE-75	264.65	0.000 +/- 0.0000	0.649 +/- 0.0169
SE-75	279.53	0.000 +/- 0.0000	0.670 +/- 0.0232
SE-75	400.65	0.000 +/- 0.0000	0.753 +/- 0.0372

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.08	4.77E-01 +/- 1.40E-01	1.55E+00	7.70E-06 +/- 7.47E-06
	2	50.49	1.61E+00 +/- 4.12E-01	1.38E+00	6.14E-05 +/- 2.98E-05
	3	60.22	5.00E+01 +/- 9.96E-01	1.34E+00	1.10E-04 +/- 3.84E-05
	4	99.39	3.06E+00 +/- 3.68E-01	1.29E+00	3.25E-04 +/- 3.31E-05
	5	103.98	2.49E+00 +/- 3.10E-01	1.28E+00	3.45E-04 +/- 3.07E-05
	6	111.61	6.20E-01 +/- 2.85E-01	1.28E+00	3.75E-04 +/- 2.73E-05
M	7	126.24	5.13E-01 +/- 1.16E-01	1.27E+00	4.20E-04 +/- 2.30E-05
m	8	130.09	4.48E+00 +/- 3.58E-01	1.27E+00	4.29E-04 +/- 2.26E-05
	9	148.57	3.75E-01 +/- 1.85E-01	1.25E+00	4.62E-04 +/- 2.28E-05
	10	204.32	2.40E-01 +/- 1.20E-01	1.21E+00	4.76E-04 +/- 2.61E-05
	11	208.76	1.82E+00 +/- 2.35E-01	1.21E+00	4.74E-04 +/- 2.60E-05
	12	279.54	3.62E-01 +/- 1.14E-01	1.16E+00	4.18E-04 +/- 2.07E-05
	13	311.90	2.11E-01 +/- 1.27E-01	1.15E+00	3.88E-04 +/- 1.78E-05
	14	333.40	4.58E-01 +/- 1.15E-01	1.14E+00	3.69E-04 +/- 1.62E-05
	15	345.59	4.67E-01 +/- 9.17E-02	1.13E+00	3.59E-04 +/- 1.54E-05
	16	375.79	7.22E-01 +/- 1.46E-01	1.12E+00	3.34E-04 +/- 1.38E-05
	17	380.68	1.84E-01 +/- 9.03E-02	1.12E+00	3.30E-04 +/- 1.36E-05
	18	393.81	3.16E-01 +/- 9.09E-02	1.11E+00	3.20E-04 +/- 1.31E-05
	19	400.66	1.08E-01 +/- 5.29E-02	1.11E+00	3.16E-04 +/- 1.29E-05
	20	413.70	8.88E-01 +/- 9.86E-02	1.11E+00	3.06E-04 +/- 1.25E-05
	21	452.29	1.35E-01 +/- 4.92E-02	1.11E+00	2.82E-04 +/- 1.16E-05
	22	662.42	4.46E-02 +/- 3.41E-02	1.09E+00	1.93E-04 +/- 9.41E-06
	23	778.90	2.60E-02 +/- 1.98E-02	1.08E+00	1.66E-04 +/- 8.00E-06
	24	867.39	3.46E-02 +/- 1.73E-02	1.07E+00	1.51E-04 +/- 6.88E-06
	25	1085.91	4.33E-02 +/- 2.35E-02	1.07E+00	1.28E-04 +/- 4.75E-06
	26	1408.01	2.60E-02 +/- 1.50E-02	1.06E+00	1.13E-04 +/- 7.00E-06
	27	2236.00	1.00E+02 +/- 1.50E+00	1.05E+00	1.19E-04 +/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 114.04 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.395 +/- 0.0148
SE-75	264.65	0.000 +/- 0.0000	0.504 +/- 0.0142
SE-75	279.53	0.000 +/- 0.0000	0.541 +/- 0.0201
SE-75	400.65	0.000 +/- 0.0000	0.551 +/- 0.0316

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.98	2.18E-01 +/- 1.03E-01	1.85E+00	6.00E-09 +/- 3.62E-08
	2	49.94	1.07E+00 +/- 4.53E-01	1.57E+00	3.02E-06 +/- 7.49E-06
	3	60.22	5.08E+01 +/- 1.01E+00	1.51E+00	1.66E-05 +/- 2.59E-05
	4	99.41	3.54E+00 +/- 3.83E-01	1.43E+00	2.36E-04 +/- 5.57E-05
	5	115.47	4.49E-01 +/- 2.85E-01	1.41E+00	3.46E-04 +/- 2.88E-05
M	6	125.89	8.91E-01 +/- 1.29E-01	1.40E+00	4.04E-04 +/- 2.41E-05
m	7	130.09	4.23E+00 +/- 3.34E-01	1.40E+00	4.24E-04 +/- 2.74E-05
	8	208.69	1.40E+00 +/- 2.11E-01	1.32E+00	5.11E-04 +/- 5.15E-05
	9	279.54	4.75E-01 +/- 1.01E-01	1.25E+00	4.23E-04 +/- 2.28E-05
	10	311.90	1.51E-01 +/- 1.03E-01	1.25E+00	3.83E-04 +/- 1.78E-05
	11	333.38	5.74E-01 +/- 1.13E-01	1.25E+00	3.59E-04 +/- 1.71E-05
	12	345.94	3.38E-01 +/- 8.91E-02	1.25E+00	3.46E-04 +/- 1.72E-05
	13	353.79	8.31E-02 +/- 5.44E-02	1.25E+00	3.38E-04 +/- 1.73E-05
	14	369.50	1.36E-01 +/- 7.90E-02	1.25E+00	3.24E-04 +/- 1.77E-05
	15	375.80	8.53E-01 +/- 1.29E-01	1.25E+00	3.18E-04 +/- 1.78E-05
	16	383.55	1.64E-01 +/- 7.26E-02	1.24E+00	3.12E-04 +/- 1.80E-05
	17	393.53	2.71E-01 +/- 8.58E-02	1.24E+00	3.03E-04 +/- 1.81E-05
	18	413.70	8.32E-01 +/- 9.87E-02	1.24E+00	2.88E-04 +/- 1.83E-05
	19	443.98	2.77E-02 +/- 2.33E-02	1.23E+00	2.68E-04 +/- 1.82E-05
	20	662.42	6.62E-02 +/- 3.16E-02	1.19E+00	1.84E-04 +/- 1.12E-05
	21	722.01	5.00E-02 +/- 2.55E-02	1.18E+00	1.72E-04 +/- 9.44E-06
	22	867.39	5.19E-02 +/- 2.12E-02	1.16E+00	1.49E-04 +/- 7.00E-06
	23	1085.91	2.43E-02 +/- 2.08E-02	1.14E+00	1.27E-04 +/- 5.58E-06
	24	1173.64	7.82E-02 +/- 3.15E-02	1.13E+00	1.21E-04 +/- 5.16E-06
	25	2236.00	1.00E+02 +/- 1.50E+00	1.10E+00	6.12E-05 +/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 114.04 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.271 +/- 0.0122
SE-75	264.65	0.000 +/- 0.0000	0.383 +/- 0.0118
SE-75	279.53	0.000 +/- 0.0000	0.412 +/- 0.0173
SE-75	400.65	0.000 +/- 0.0000	0.409 +/- 0.0260

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	50.79	3.99E+00 +/- 5.36E-01	1.84E+00	8.78E-05 +/- 4.29E-05
	2	60.21	4.73E+01 +/- 9.59E-01	1.76E+00	1.38E-04 +/- 4.88E-05
	3	99.33	2.78E+00 +/- 3.85E-01	1.63E+00	3.30E-04 +/- 3.41E-05
M	4	126.08	6.23E-01 +/- 1.12E-01	1.59E+00	4.08E-04 +/- 2.27E-05
m	5	130.05	4.28E+00 +/- 3.39E-01	1.58E+00	4.16E-04 +/- 2.21E-05
M	6	145.25	4.20E-01 +/- 1.17E-01	1.56E+00	4.40E-04 +/- 2.19E-05
m	7	149.45	6.39E-01 +/- 1.53E-01	1.55E+00	4.44E-04 +/- 2.22E-05
	8	208.67	1.38E+00 +/- 2.21E-01	1.47E+00	4.56E-04 +/- 2.51E-05
	9	229.07	3.05E-01 +/- 1.29E-01	1.45E+00	4.46E-04 +/- 2.42E-05
	10	279.54	2.70E-01 +/- 1.09E-01	1.37E+00	4.12E-04 +/- 2.03E-05
	11	300.10	2.00E-01 +/- 1.10E-01	1.37E+00	3.96E-04 +/- 1.86E-05
	12	311.90	1.96E-01 +/- 9.80E-02	1.37E+00	3.87E-04 +/- 1.76E-05
	13	333.61	6.99E-01 +/- 1.20E-01	1.38E+00	3.70E-04 +/- 1.62E-05
	14	345.60	2.46E-01 +/- 7.99E-02	1.38E+00	3.62E-04 +/- 1.54E-05
	15	375.77	6.92E-01 +/- 1.50E-01	1.38E+00	3.40E-04 +/- 1.40E-05
M	16	380.67	1.53E-01 +/- 5.69E-02	1.38E+00	3.37E-04 +/- 1.38E-05
m	17	383.38	1.98E-01 +/- 6.54E-02	1.38E+00	3.35E-04 +/- 1.37E-05
	18	393.66	3.04E-01 +/- 8.96E-02	1.38E+00	3.28E-04 +/- 1.34E-05
	19	413.70	9.62E-01 +/- 1.09E-01	1.37E+00	3.15E-04 +/- 1.29E-05
	20	452.19	1.04E-01 +/- 4.60E-02	1.36E+00	2.92E-04 +/- 1.22E-05
	21	662.42	5.08E-02 +/- 4.59E-02	1.29E+00	2.06E-04 +/- 1.03E-05
	22	1173.84	7.09E-02 +/- 2.71E-02	1.21E+00	1.23E-04 +/- 4.69E-06
	23	1408.01	2.81E-02 +/- 1.93E-02	1.19E+00	1.09E-04 +/- 6.83E-06
	24	2236.00	1.00E+02 +/- 1.50E+00	1.15E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 114.02 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.179 +/- 0.0100
SE-75	264.65	0.000 +/- 0.0000	0.258 +/- 0.0092
SE-75	279.53	0.000 +/- 0.0000	0.269 +/- 0.0141
SE-75	400.65	0.000 +/- 0.0000	0.313 +/- 0.0237

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.02	1.90E-01 +/- 1.01E-01	2.78E+00	1.33E-03 +/- 8.62E-03
	2	60.21	4.76E+01 +/- 9.69E-01	2.05E+00	5.03E-04 +/- 8.44E-04
	3	99.41	2.65E+00 +/- 3.89E-01	1.87E+00	4.09E-04 +/- 1.03E-04
	4	111.63	4.98E-01 +/- 2.49E-01	1.84E+00	4.03E-04 +/- 4.49E-05
M	5	125.92	7.71E-01 +/- 1.27E-01	1.81E+00	4.00E-04 +/- 2.37E-05
m	6	130.02	4.40E+00 +/- 3.45E-01	1.80E+00	3.99E-04 +/- 2.64E-05
	7	148.57	4.10E-01 +/- 1.89E-01	1.77E+00	3.97E-04 +/- 4.23E-05
M	8	161.74	3.26E-01 +/- 1.17E-01	1.75E+00	3.96E-04 +/- 4.80E-05
m	9	165.17	3.07E-01 +/- 1.11E-01	1.74E+00	3.95E-04 +/- 4.88E-05
	10	208.72	1.82E+00 +/- 2.33E-01	1.67E+00	3.88E-04 +/- 4.33E-05
	11	279.54	3.27E-01 +/- 1.00E-01	1.58E+00	3.66E-04 +/- 2.15E-05
	12	311.90	2.91E-01 +/- 1.01E-01	1.56E+00	3.53E-04 +/- 1.69E-05
	13	333.34	6.47E-01 +/- 1.11E-01	1.54E+00	3.43E-04 +/- 1.63E-05
	14	345.87	3.23E-01 +/- 9.83E-02	1.54E+00	3.38E-04 +/- 1.66E-05
	15	375.68	1.08E+00 +/- 1.31E-01	1.52E+00	3.25E-04 +/- 1.79E-05
	16	413.70	1.23E+00 +/- 1.12E-01	1.50E+00	3.08E-04 +/- 1.94E-05
	17	452.28	1.15E-01 +/- 5.94E-02	1.48E+00	2.91E-04 +/- 2.00E-05
	18	722.01	2.49E-02 +/- 2.37E-02	1.36E+00	1.97E-04 +/- 1.08E-05
	19	1408.01	1.73E-02 +/- 1.23E-02	1.24E+00	9.35E-05 +/- 6.52E-06
	20	2236.00	1.00E+02 +/- 1.50E+00	1.20E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.94 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.081 +/- 0.0073
SE-75	264.65	0.000 +/- 0.0000	0.123 +/- 0.0061
SE-75	279.53	0.000 +/- 0.0000	0.148 +/- 0.0111
SE-75	400.65	0.000 +/- 0.0000	0.172 +/- 0.0170

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	49.82	2.96E+00 +/- 5.75E-01	2.86E+00	1.99E-06 +/- 5.07E-06
	2	60.21	6.55E+01 +/- 1.19E+00	2.66E+00	1.31E-05 +/- 2.09E-05
	3	78.56	3.32E-01 +/- 2.18E-01	2.47E+00	8.37E-05 +/- 5.85E-05
	4	99.35	4.31E+00 +/- 4.13E-01	2.36E+00	2.33E-04 +/- 5.61E-05
	5	104.02	3.70E+00 +/- 3.52E-01	2.34E+00	2.69E-04 +/- 4.87E-05
	6	115.38	5.22E-01 +/- 3.48E-01	2.30E+00	3.51E-04 +/- 2.93E-05
M	7	125.99	1.06E+00 +/- 1.40E-01	2.27E+00	4.17E-04 +/- 2.45E-05
m	8	130.01	4.85E+00 +/- 3.59E-01	2.25E+00	4.38E-04 +/- 2.82E-05
	9	148.57	5.05E-01 +/- 2.23E-01	2.21E+00	5.08E-04 +/- 5.12E-05
	10	185.71	4.70E-01 +/- 2.03E-01	2.13E+00	5.47E-04 +/- 6.36E-05
	11	208.68	2.62E+00 +/- 2.50E-01	2.09E+00	5.31E-04 +/- 5.52E-05
	12	229.15	2.87E-01 +/- 1.23E-01	2.05E+00	5.05E-04 +/- 4.49E-05
	13	268.08	1.99E-01 +/- 1.53E-01	1.97E+00	4.49E-04 +/- 2.74E-05
	14	279.54	3.76E-01 +/- 1.20E-01	1.89E+00	4.32E-04 +/- 2.38E-05
	15	311.90	4.35E-01 +/- 1.10E-01	1.87E+00	3.88E-04 +/- 1.81E-05
	16	333.31	1.90E-01 +/- 1.09E-01	1.86E+00	3.62E-04 +/- 1.72E-05
	17	345.66	2.84E-01 +/- 1.19E-01	1.85E+00	3.49E-04 +/- 1.72E-05
	18	375.73	7.00E-01 +/- 1.62E-01	1.83E+00	3.19E-04 +/- 1.78E-05
M	19	380.72	2.34E-01 +/- 6.82E-02	1.83E+00	3.14E-04 +/- 1.80E-05
m	20	383.53	2.56E-01 +/- 7.11E-02	1.82E+00	3.12E-04 +/- 1.80E-05
	21	393.64	3.92E-01 +/- 8.95E-02	1.82E+00	3.03E-04 +/- 1.82E-05
	22	413.70	1.30E+00 +/- 1.32E-01	1.80E+00	2.87E-04 +/- 1.84E-05
	23	451.87	1.88E-01 +/- 6.38E-02	1.76E+00	2.62E-04 +/- 1.82E-05
	24	867.39	2.86E-02 +/- 2.52E-02	1.52E+00	1.48E-04 +/- 7.05E-06
	25	2236.00	1.00E+02 +/- 1.50E+00	1.31E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 114.02 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.062 +/- 0.0043
SE-75	279.53	0.000 +/- 0.0000	0.071 +/- 0.0083
SE-75	400.65	0.000 +/- 0.0000	0.126 +/- 0.0145

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.17	2.28E-01 +/- 1.49E-01	4.10E+00	1.86E-08 +/- 1.20E-07
	2	60.22	5.25E+01 +/- 1.04E+00	3.34E+00	2.30E-05 +/- 3.89E-05
	3	99.29	2.00E+00 +/- 4.10E-01	2.92E+00	2.49E-04 +/- 6.32E-05
M	4	111.78	1.81E+00 +/- 2.42E-01	2.85E+00	3.30E-04 +/- 3.64E-05
m	5	115.28	1.34E+00 +/- 1.96E-01	2.83E+00	3.50E-04 +/- 3.00E-05
M	6	125.99	1.01E+00 +/- 1.35E-01	2.79E+00	4.03E-04 +/- 2.40E-05
m	7	130.06	4.55E+00 +/- 3.52E-01	2.77E+00	4.19E-04 +/- 2.78E-05
	8	148.57	7.99E-01 +/- 2.59E-01	2.70E+00	4.73E-04 +/- 5.02E-05
	9	208.66	1.89E+00 +/- 2.33E-01	2.53E+00	4.88E-04 +/- 5.34E-05
	10	228.90	2.17E-01 +/- 1.30E-01	2.48E+00	4.68E-04 +/- 4.37E-05
	11	279.54	2.99E-01 +/- 1.04E-01	2.32E+00	4.09E-04 +/- 2.33E-05
	12	311.90	2.19E-01 +/- 1.09E-01	2.22E+00	3.74E-04 +/- 1.79E-05
M	13	333.61	6.29E-01 +/- 1.15E-01	2.15E+00	3.53E-04 +/- 1.73E-05
m	14	336.32	4.30E-01 +/- 8.77E-02	2.14E+00	3.50E-04 +/- 1.73E-05
	15	345.71	3.91E-01 +/- 9.48E-02	2.12E+00	3.41E-04 +/- 1.75E-05
	16	375.65	8.35E-01 +/- 1.49E-01	2.04E+00	3.16E-04 +/- 1.85E-05
M	17	380.63	1.66E-01 +/- 6.08E-02	2.03E+00	3.13E-04 +/- 1.87E-05
m	18	383.29	2.45E-01 +/- 7.53E-02	2.02E+00	3.11E-04 +/- 1.88E-05
	19	393.47	4.64E-01 +/- 9.38E-02	2.00E+00	3.03E-04 +/- 1.90E-05
	20	413.70	1.11E+00 +/- 1.13E-01	1.97E+00	2.89E-04 +/- 1.94E-05
	21	451.85	1.66E-01 +/- 5.42E-02	1.92E+00	2.67E-04 +/- 1.94E-05
	22	662.42	1.08E-01 +/- 3.61E-02	1.74E+00	1.92E-04 +/- 1.21E-05
	23	1085.91	1.75E-02 +/- 1.24E-02	1.54E+00	1.32E-04 +/- 5.78E-06
	24	2236.00	1.00E+02 +/- 1.50E+00	1.37E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 114.16 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.064 +/- 0.0041
SE-75	279.53	0.000 +/- 0.0000	0.071 +/- 0.0076
SE-75	400.65	0.000 +/- 0.0000	0.084 +/- 0.0147

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.90	3.26E-01 +/- 1.03E-01	4.10E+00	3.38E-06 +/- 2.05E-05
	2	49.83	1.67E+00 +/- 4.12E-01	3.59E+00	4.54E-05 +/- 1.13E-04
	3	60.21	2.91E+01 +/- 7.07E-01	3.30E+00	9.61E-05 +/- 1.50E-04
	4	99.45	2.39E+00 +/- 3.18E-01	2.88E+00	3.19E-04 +/- 7.51E-05
M	5	126.12	4.43E-01 +/- 9.77E-02	2.75E+00	4.13E-04 +/- 2.41E-05
m	6	130.04	2.91E+00 +/- 2.82E-01	2.74E+00	4.22E-04 +/- 2.68E-05
	7	148.57	3.67E-01 +/- 2.11E-01	2.67E+00	4.51E-04 +/- 4.47E-05
	8	172.23	2.35E-01 +/- 1.67E-01	2.60E+00	4.64E-04 +/- 5.40E-05
	9	208.71	4.29E-01 +/- 2.00E-01	2.51E+00	4.54E-04 +/- 4.69E-05
	10	228.76	1.64E-01 +/- 8.51E-02	2.46E+00	4.41E-04 +/- 3.92E-05
	11	311.90	2.70E-01 +/- 8.63E-02	2.29E+00	3.71E-04 +/- 1.72E-05
	12	333.56	4.02E-01 +/- 9.90E-02	2.27E+00	3.53E-04 +/- 1.64E-05
	13	345.70	4.21E-01 +/- 8.60E-02	2.26E+00	3.44E-04 +/- 1.65E-05
	14	375.58	5.67E-01 +/- 1.20E-01	2.24E+00	3.22E-04 +/- 1.72E-05
	15	393.57	2.22E-01 +/- 7.74E-02	2.22E+00	3.10E-04 +/- 1.77E-05
	16	413.70	6.74E-01 +/- 9.35E-02	2.20E+00	2.98E-04 +/- 1.80E-05
	17	778.90	3.20E-02 +/- 3.01E-02	1.82E+00	1.70E-04 +/- 8.37E-06
	18	1112.12	1.94E-02 +/- 1.75E-02	1.65E+00	1.26E-04 +/- 5.44E-06
	19	2236.00	1.00E+02 +/- 1.50E+00	1.45E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.27 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.380 +/- 0.0141
SE-75	264.65	0.000 +/- 0.0000	0.499 +/- 0.0140
SE-75	279.53	0.000 +/- 0.0000	0.495 +/- 0.0194
SE-75	400.65	0.000 +/- 0.0000	0.576 +/- 0.0314

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.23	1.46E+01 +/- 4.95E-01	1.54E+00	1.24E-05 +/- 2.04E-05
2	99.23	8.08E-01 +/- 2.73E-01	1.45E+00	2.32E-04 +/- 5.77E-05
3	104.19	6.09E-01 +/- 2.14E-01	1.44E+00	2.69E-04 +/- 4.93E-05
4	129.29	1.57E+00 +/- 2.46E-01	1.42E+00	4.21E-04 +/- 2.67E-05
5	148.57	5.06E-01 +/- 1.62E-01	1.40E+00	4.82E-04 +/- 5.01E-05
6	208.95	2.38E-01 +/- 1.32E-01	1.33E+00	4.80E-04 +/- 5.22E-05
7	244.70	1.51E-01 +/- 9.32E-02	1.30E+00	4.32E-04 +/- 3.49E-05
8	375.84	2.64E-01 +/- 7.28E-02	1.24E+00	2.88E-04 +/- 1.59E-05
9	393.57	1.10E-01 +/- 6.31E-02	1.23E+00	2.75E-04 +/- 1.62E-05
10	413.70	3.02E-01 +/- 6.35E-02	1.22E+00	2.62E-04 +/- 1.65E-05
11	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.33 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.440 +/- 0.0151
SE-75	264.65	0.000 +/- 0.0000	0.507 +/- 0.0140
SE-75	279.53	0.000 +/- 0.0000	0.524 +/- 0.0199
SE-75	400.65	0.000 +/- 0.0000	0.581 +/- 0.0318

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.21	5.72E+00 +/- 3.07E-01	1.45E+00	5.63E-05 +/- 2.42E-05
2	129.29	3.25E-01 +/- 1.40E-01	1.35E+00	2.27E-04 +/- 1.46E-05
3	148.57	2.47E-01 +/- 1.47E-01	1.34E+00	2.48E-04 +/- 1.51E-05
4	208.98	1.68E-01 +/- 9.02E-02	1.30E+00	2.62E-04 +/- 1.78E-05
5	244.70	1.33E-01 +/- 7.71E-02	1.29E+00	2.52E-04 +/- 1.64E-05
6	393.77	5.67E-02 +/- 3.91E-02	1.22E+00	1.86E-04 +/- 9.25E-06
7	413.70	9.21E-02 +/- 4.17E-02	1.22E+00	1.79E-04 +/- 8.85E-06
8	722.01	8.62E-02 +/- 2.73E-02	1.16E+00	1.06E-04 +/- 6.56E-06
9	1333.42	8.62E-02 +/- 2.73E-02	1.11E+00	6.64E-05 +/- 4.06E-06
10	1408.01	8.62E-03 +/- 8.62E-03	1.11E+00	6.48E-05 +/- 4.76E-06

11	2236.00	1.00E+02	+/-	1.49E+00	1.09E+00	6.28E-05	+/-	1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85501375
Peak Locate Performed on: 8-30-07 3:07:12 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.93	0.2185	32.13	8.47
2	100.88	0.1969	50.11	8.06
3	121.10	0.0479	60.21	190.31
4	151.39	0.2658	75.36	6.60
5	199.39	0.0889	99.36	51.43
6	231.74	0.1679	115.54	12.73
7	260.85	0.0813	130.09	65.79
8	290.21	0.2386	144.77	8.36
9	299.38	0.1693	149.36	15.54
10	323.93	0.2484	161.63	6.05
11	344.98	0.2957	172.15	5.78
12	418.06	0.0989	208.70	43.03
13	458.32	0.1484	228.83	18.50
14	512.90	0.2647	256.11	6.19
15	557.22	0.1358	278.27	21.76
16	597.13	0.2994	298.23	5.12
17	625.80	0.1527	312.57	16.87
18	667.68	0.1419	333.57	19.37
19	673.94	0.3043	336.26	5.84
20	692.01	0.1396	345.67	21.24
21	752.11	0.1042	375.72	36.06
22	762.03	0.2086	380.87	10.74
23	767.77	0.2113	383.41	10.21
24	787.95	0.1415	393.64	19.75
25	829.50	0.1037	414.42	31.90
26	847.23	0.2196	423.28	8.24
27	904.92	0.1842	452.13	11.67
28	1024.45	0.2335	511.89	5.50
29	1119.25	0.2529	559.29	5.96
30	1326.83	0.2470	663.08	6.28
31	2667.39	0.2404	1333.36	5.29
32	4471.93	0.0263	2235.63	411.91

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85501375
Peak Analysis Performed on: 8-30-07 3:07:12 PM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	60-	68	64.93	32.13	4.53E+02	45.11	6.59E+02
	2	94-	107	100.88	50.11	4.11E+03	223.46	1.58E+04
	3	114-	127	121.10	60.21	6.79E+04	327.17	1.40E+04
	4	144-	154	151.39	75.36	2.09E+02	90.24	3.30E+03
	5	194-	203	199.39	99.36	5.09E+03	178.72	1.19E+04
	6	228-	238	231.74	115.54	1.19E+03	136.35	6.92E+03
	7	256-	267	260.85	130.09	6.83E+03	137.07	4.69E+03
	8	286-	293	290.21	144.77	2.01E+02	70.95	2.39E+03
	9	296-	304	299.38	149.36	6.29E+02	79.10	2.61E+03
	10	320-	328	323.93	161.63	1.25E+02	72.17	2.36E+03
	11	342-	347	344.98	172.15	1.56E+02	50.30	1.34E+03
	12	413-	425	418.06	208.70	2.79E+03	104.77	3.02E+03
	13	453-	462	458.32	228.83	7.58E+02	57.80	1.15E+03
	14	509-	516	512.90	256.11	1.22E+02	38.90	6.91E+02
	15	553-	561	557.22	278.27	9.14E+02	47.69	6.38E+02
	16	592-	604	597.13	298.23	1.97E+02	48.75	8.30E+02
	17	622-	630	625.80	312.57	5.15E+02	42.85	6.11E+02
M	18	660-	677	667.81	333.57	1.02E+03	54.91	5.40E+02
m	19	660-	677	673.19	336.26	3.46E+02	28.37	4.82E+02
	20	689-	699	692.01	345.67	7.53E+02	44.02	4.79E+02
	21	746-	759	752.11	375.72	1.52E+03	70.92	1.19E+03
M	22	759-	775	762.41	380.87	3.53E+02	31.28	3.09E+02
m	23	759-	775	767.48	383.41	4.09E+02	33.60	2.56E+02
	24	780-	795	787.95	393.64	7.84E+02	43.40	3.64E+02
	25	824-	837	829.50	414.42	2.00E+03	52.80	2.84E+02
	26	842-	851	847.23	423.28	1.11E+02	22.92	1.84E+02
	27	900-	912	904.92	452.13	2.63E+02	27.00	1.74E+02
	28	1016-	1032	1024.45	511.89	3.62E+02	27.95	1.34E+02
	29	1116-	1127	1119.25	559.29	6.45E+01	17.89	9.95E+01
	30	1318-	1335	1326.83	663.08	1.18E+02	19.49	7.95E+01
	31	2663-	2673	2667.39	1333.36	6.47E+01	10.96	2.33E+01
	32	4464-	4478	4471.93	2235.63	1.85E+05	430.28	1.03E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85501375
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.990	2236.00*	100.00	8.783E+02	1.644E+02
Np-237	0.737	300.10	6.63		
		311.90*	38.60	1.774E+00	1.480E-01
Pu-239	0.964	413.70*	0.00	2.124E+05	6.802E+03
Pu-239A	0.956	129.29*	0.01	1.571E+05	4.660E+03
Am-241	0.970	662.42*	0.00	6.420E+04	1.066E+04
Pu-241	0.957	148.57*	0.00	4.307E+05	5.460E+04

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-30-07 3:07:12 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	32.13	3.9317E+00	9.97
2	50.11	3.5717E+01	5.44
3	60.21	5.8971E+02	0.54
4	75.36	1.8125E+00	43.25
5	99.36	4.4253E+01	3.52
6	115.54	1.0373E+01	11.42
8	144.77	1.7489E+00	35.24
10	161.63	1.0836E+00	57.86
11	172.15	1.3565E+00	32.21
12	208.70	2.4201E+01	3.77
13	228.83	6.5859E+00	7.63
14	256.11	1.0601E+00	31.88
15	278.27	7.9365E+00	5.23
16	298.23	1.7089E+00	24.78
M 18	333.57	8.8936E+00	5.37
m 19	336.26	3.0032E+00	8.21
20	345.67	6.5377E+00	5.85
21	375.72	1.3228E+01	4.66
M 22	380.87	3.0655E+00	8.87
m 23	383.41	3.5498E+00	8.23
24	393.64	6.8114E+00	5.54
26	423.28	9.6590E-01	20.62
27	452.13	2.2834E+00	10.27
28	511.89	3.1412E+00	7.73
29	559.29	5.6068E-01	27.71
31	1333.36	5.6219E-01	16.94

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		9.59E+02	+/-	1.46E+02		1.30E-02	+/-	1.98E-03
SE-75	<	8.19E-02	+/-	5.52E-03	<	1.11E-06	+/-	7.49E-08
EU-152x	<	2.63E-01	+/-	1.94E-02	<	3.56E-06	+/-	2.63E-07
U-233	<	5.20E+03	+/-	4.19E+02	<	7.05E-02	+/-	5.69E-03
U-235		8.66E-02	+/-	3.88E-02		1.17E-06	+/-	5.27E-07
Np-237		1.38E+00	+/-	1.60E-01		1.88E-05	+/-	2.17E-06
Pu-238	<	7.83E+03	+/-	8.92E+02	<	1.06E-01	+/-	1.21E-02
U-238	<	5.89E+00	+/-	3.11E-01	<	8.00E-05	+/-	4.22E-06
Pu-239		2.00E+05	+/-	7.08E+03		2.72E+00	+/-	9.61E-02
Pu-239A		1.79E+05	+/-	5.49E+03		2.43E+00	+/-	7.45E-02
Am-241		5.25E+04	+/-	8.17E+03		7.13E-01	+/-	1.11E-01
Am-241D		5.85E+04	+/-	1.12E+04		7.94E-01	+/-	1.53E-01
Pu-241		4.36E+05	+/-	6.20E+04		5.91E+00	+/-	8.41E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-235	4.01E-02	+/-	1.80E-02
Np-237	1.96E-03	+/-	2.27E-04
Pu-239	3.23E+00	+/-	1.14E-01
Pu-239A	2.88E+00	+/-	8.84E-02
Am-241	1.53E-02	+/-	2.39E-03
Pu-241	4.21E-03	+/-	5.99E-04

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.78E+02	+/-	1.64E+02		1.19E-02	+/-	2.23E-03
SE-75	<	4.69E-01	+/-	3.67E-03	<	6.36E-06	+/-	4.97E-08
EU-152x	<	7.12E-01	+/-	1.06E-02	<	9.66E-06	+/-	1.45E-07
U-233	<	3.24E+04	+/-	6.33E+02	<	4.39E-01	+/-	8.58E-03
U-235	<	6.70E-01	+/-	1.41E-02	<	9.08E-06	+/-	1.91E-07
Np-237		1.77E+00	+/-	1.48E-01		2.41E-05	+/-	2.01E-06
Pu-238	<	5.23E+04	+/-	8.51E+02	<	7.10E-01	+/-	1.16E-02
U-238	<	1.84E+01	+/-	2.83E-01	<	2.50E-04	+/-	3.84E-06
Pu-239		2.12E+05	+/-	6.80E+03		2.88E+00	+/-	9.23E-02
Pu-239A		1.57E+05	+/-	4.66E+03		2.13E+00	+/-	6.32E-02
Am-241		6.42E+04	+/-	1.07E+04		8.71E-01	+/-	1.45E-01
Am-241D	<	7.65E+04	+/-	6.29E+02	<	1.04E+00	+/-	8.54E-03
Pu-241		4.31E+05	+/-	5.46E+04		5.84E+00	+/-	7.41E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	2.52E-03	+/-	2.10E-04
Pu-239	3.42E+00	+/-	1.10E-01
Pu-239A	2.53E+00	+/-	7.50E-02
Am-241	1.87E-02	+/-	3.11E-03
Pu-241	4.16E-03	+/-	5.28E-04

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.825	+/-	3.3531
Matrix Longitudinal Ratio:	0.928	+/-	0.4894
Source Vertical Ratio:	0.500	+/-	0.2788
Matrix Vertical Ratio:	0.967	+/-	0.1470

NUDS could not find the transmission peak in one radial segment.

Radioassay Data Sheet — Wed Aug 22 09:42:22 2007

Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: S100-2381	Gross Weight (kg)	: 54.0
Sequence Number	: 2381	Fill Height (%)	: 100.0
Assay Date	: 08/22/07 08:43:20	Density (g/cc)	: 0.11
		Net Weight (kg)	: 22.20
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma			
TRU Alpha Activity Concentration:	4.25e-04	+/-	5.23e-05	Ci/g
Total Pu-239 Equiv Activity:	9.83e+00	+/-	1.16e+00	Ci
Total Pu-239 Fissile Gram Equiv:	1.05e+02	+/-	1.79e+01	g
Decay Heat:	3.01e-01	+/-	3.66e-02	W
Total Pu Mass:	1.11e+02	+/-	1.80e+01	g
TMU:	17.11%			
Waste Classification:	TRU			

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	9.08e-03	7.33e+00
Pu-239	9.43e+01	5.63e-02
Pu-240	5.46e+00	9.65e-01
Pu-241	1.85e-01	7.40e-01
Pu-242	3.01e-02	1.00e+01
Am-241	4.89e-01	5.30e-01
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	1.01e-02	1.88e-03	1.73e-01	3.22e-02	3.03e-03
Pu-239	1.05e+02	1.79e+01	6.51e+00	1.11e+00	3.37e-01
Pu-240	6.07e+00	1.04e+00	1.38e+00	2.36e-01	0.00e+00
Pu-241	2.06e-01	3.52e-02	2.13e+01	3.64e+00	6.04e-03
Pu-242	3.35e-02	6.64e-03	1.32e-04	2.61e-05	0.00e+00
Am-241	4.01e-01	6.75e-02	1.37e+00	2.31e-01	6.65e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	1.32e-02	2.28e-03	9.27e-06	1.61e-06	1.82e-03
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	3.32e-01
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	2.07e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	3.22e+00
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature _____ Date _____

Reviewer Signature _____ Date _____

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: S100-2381
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2381
Assayed on: 08/22/07 08:43:20
Report Generated: 08/22/07 09:42:06
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

REVIEW Pu-240 Wt Pct +2 Sigma error <5.56> less than <5.87> Review MGA Resu
Pu-240 Wt Pct error <0.97> is within limits
Pu-238 Wt Pct error <7.33> is within limits
REVIEW QFIT <1.90> > <1.20> Review MGA Results

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.107> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.54e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <1.51> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <1.89> is acceptable in Segment 2
Pulser value <1.00> is within range in Segment 2
DEAD TIME percentage <4.21> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <14.34> is acceptable in Segment 4
Pulser value <1.01> is within range in Segment 4
DEAD TIME percentage <26.90> is acceptable in Segment 5
Pulser value <0.98> is within range in Segment 5
DEAD TIME percentage <26.81> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <17.12> is acceptable in Segment 7
Pulser value <1.00> is within range in Segment 7
DEAD TIME percentage <6.11> is acceptable in Segment 8
Pulser value <1.01> is within range in Segment 8
DEAD TIME percentage <2.06> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <1.49> is acceptable in Segment 10
Pulser value <1.00> is within range in Segment 10
DEAD TIME percentage <1.27> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.07> is acceptable in Segment 12
Pulser value <1.00> is within range in Segment 12
DEAD TIME percentage <0.87> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.75> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.70> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15
DEAD TIME percentage <0.68> is acceptable in Segment 16
Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
REVIEW Fiducial Transmission Line <400.645996> < <0.01> found in Segment 5
Transmission results are acceptable in Segment 6
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

REVIEW Reduced chi squared fit value <7.15e+00> exceeds limit <3.00> for energy peak <129.98> in Segment 4
REVIEW Reduced chi squared fit value <1.68e+01> exceeds limit <3.00> for energy peak <129.94> in Segment 5
REVIEW Reduced chi squared fit value <1.68e+01> exceeds limit <3.00> for energy peak <129.94> in Segment 6
REVIEW Reduced chi squared fit value <9.52e+00> exceeds limit <3.00> for energy peak <129.97> in Segment 7

Section 7 - FGE MASS REVIEW

REVIEW FGE Mass <123.44> > <110.00>

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <261.35> is above lower limit <200.00>
Np-237 ratio <7972.85> is above lower limit <125.00>

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <104.88> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed

Independent Reviewer:_____Date:_____

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: S100-2381
Item Description Code:
Sequence Number: 2381
Assayed on: 08/22/07 08:43:20
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA Pu-240 Wt Pct +2 Sigma error is less than lower limit. QFIT is greater than upper limit.	
SECTION 5 - TRANSMISSION Low Transmission Line 136.0 less than 0.001 found in Segment 7 Fiducial Transmission Line less than 0.01 found in Segment 5	
SECTION 6 - REDUCED CHI SQUARED FIT Chi square failure for 130.0 Kev in Segment 4 Chi square failure for 129.9 Kev in Segment 5 Chi square failure for 129.9 Kev in Segment 6 Chi square failure for 130.0 Kev in Segment 7	
SECTION 7 - FGE MASS FGE Mass is greater than upper limit.	
SECTION 9 - IDC COUNT TYPE IDC is not available.	

Technical Reviewer:_____ Date:_____

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***********************************************************************
*****                        M G A   R E P O R T                  *****
***********************************************************************
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Report generated on: 8-22-07 9:39:53 AM

MGA version: MGA V9.5 CI

Spectrum ID: 11202381.CNF Sens : 30.0% LT: 46.5 Mins DT: 16.77
Measurement date: 8-22-07 Declared date: 8-22-07

Sample ID: S100-2381 Detector: Total counts: 1.302E+07

Pu g/cm2 = 0.8152 Cd g/cm2 = 1.7919 FWHM at 122 keV = 618 eV
QFIT = 1.90 FWHM at 208 keV = 789 eV
NQFIT = 1.04

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000096	7.3	7.3	0.0491	7.3	0.00908	7.33	0.00908	7.33
Pu-239	1.000000	0.0	0.4	510.1298	0.8	94.32060	0.06	94.32060	0.06
Pu-240	0.057838	1.0	1.0	29.5047	1.1	5.45528	0.97	5.45528	0.97
Pu-241	0.001960	0.8	0.7	1.0000	0.0	0.18490	0.74	0.18490	0.74
Pu-242	(New alg.	)		0.1630	(10)	0.03014	(10)	0.03014	(10)
Am-241	0.005188	0.5	0.4	2.6464	0.7	0.48930	0.53	0.48930	0.53

Pu-240 effective (meas. date) = 5.529 +/- 1.04%
Am-241 separated about 26.792 +/- 0.169 years ago
Am/Pu-241 weight ratio = 2.64639 +/- 0.76%

Messages :

Lead x-rays detected.
Pu-241/Pu-239 efficiency changed in MGACAL by 1%.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102381.S11
Sample ID: S100-2381 Count Sequence Number: 2381
Assay Start: 8-22-07 8:43:23 AM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 54000.0 g Net: 22200.0 g
Density: 0.107 g /ml

Container Type: 55 Gal Galv
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: Daily 100g Drum Check
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 4:21:04 PM 70097

Reviewed by: _____ Date: _____

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 113.26 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.376 +/- 0.0184
SE-75	264.65	0.000 +/- 0.0000	0.490 +/- 0.0153
SE-75	279.53	0.000 +/- 0.0000	0.533 +/- 0.0242
SE-75	400.65	0.000 +/- 0.0000	0.562 +/- 0.0319

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.99	1.58E+00 +/- 2.38E-01	1.90E+00	4.50E-10 +/- 3.20E-09
	2	49.08	3.33E+00 +/- 5.25E-01	1.61E+00	6.61E-07 +/- 2.01E-06
M	3	57.92	4.10E+00 +/- 3.85E-01	1.55E+00	4.37E-06 +/- 8.90E-06
m	4	59.99	5.38E+00 +/- 4.42E-01	1.55E+00	6.16E-06 +/- 1.14E-05
	5	339.93	2.55E-01 +/- 1.32E-01	1.25E+00	2.52E-04 +/- 1.33E-05
	6	400.66	1.33E-01 +/- 7.03E-02	1.24E+00	2.10E-04 +/- 1.43E-05
	7	512.11	3.24E-01 +/- 6.18E-02	1.21E+00	1.61E-04 +/- 1.31E-05
	8	1112.12	2.62E-02 +/- 1.51E-02	1.13E+00	8.48E-05 +/- 4.39E-06
	9	2236.00	1.00E+02 +/- 1.50E+00	1.10E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 112.83 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.456 +/- 0.0196
SE-75	264.65	0.000 +/- 0.0000	0.611 +/- 0.0176
SE-75	279.53	0.000 +/- 0.0000	0.597 +/- 0.0262
SE-75	400.65	0.000 +/- 0.0000	0.647 +/- 0.0356

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.93	1.22E+00 +/- 2.16E-01	1.70E+00	1.85E-05 +/- 1.16E-04
2	49.23	3.41E+00 +/- 5.27E-01	1.48E+00	7.98E-05 +/- 2.11E-04
3	60.07	1.58E+01 +/- 7.01E-01	1.43E+00	1.32E-04 +/- 2.14E-04
4	99.24	1.78E+00 +/- 7.80E-01	1.36E+00	3.09E-04 +/- 7.56E-05
5	121.11	1.23E+00 +/- 7.51E-01	1.34E+00	3.71E-04 +/- 2.29E-05
6	413.70	1.65E-01 +/- 7.79E-02	1.17E+00	2.89E-04 +/- 1.85E-05
7	511.17	1.64E-01 +/- 6.87E-02	1.15E+00	2.39E-04 +/- 1.72E-05
8	662.42	3.55E-02 +/- 2.51E-02	1.13E+00	1.86E-04 +/- 1.15E-05
9	1174.48	5.32E-02 +/- 3.33E-02	1.10E+00	1.13E-04 +/- 4.90E-06
10	2236.00	1.00E+02 +/- 1.51E+00	1.07E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 110.16 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.404 +/- 0.0245
SE-75	264.65	0.000 +/- 0.0000	0.538 +/- 0.0179
SE-75	279.53	0.000 +/- 0.0000	0.541 +/- 0.0303
SE-75	400.65	0.000 +/- 0.0000	0.625 +/- 0.0446

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.02	4.99E+00 +/- 4.39E-01	1.82E+00	3.43E-06 +/- 3.29E-06
	2	60.17	7.33E+01 +/- 1.47E+00	1.50E+00	8.07E-05 +/- 2.79E-05
	3	99.41	2.77E+01 +/- 1.45E+00	1.42E+00	2.97E-04 +/- 3.03E-05
	4	111.70	6.74E+00 +/- 1.08E+00	1.40E+00	3.54E-04 +/- 2.60E-05
	5	116.24	2.35E+00 +/- 1.35E+00	1.40E+00	3.73E-04 +/- 2.47E-05
M	6	125.96	4.47E+00 +/- 4.04E-01	1.39E+00	4.08E-04 +/- 2.26E-05
m	7	130.00	2.60E+01 +/- 9.75E-01	1.39E+00	4.20E-04 +/- 2.22E-05
	8	148.57	3.27E+00 +/- 7.93E-01	1.37E+00	4.63E-04 +/- 2.25E-05
	9	196.40	1.63E+00 +/- 5.84E-01	1.31E+00	4.95E-04 +/- 2.60E-05
	10	208.69	1.52E+01 +/- 8.49E-01	1.30E+00	4.92E-04 +/- 2.59E-05
	11	244.70	9.94E-01 +/- 6.07E-01	1.27E+00	4.68E-04 +/- 2.38E-05
	12	311.90	1.86E+00 +/- 5.23E-01	1.23E+00	4.04E-04 +/- 1.79E-05
	13	322.01	1.79E+00 +/- 4.70E-01	1.23E+00	3.95E-04 +/- 1.71E-05
M	14	333.38	7.41E+00 +/- 4.94E-01	1.22E+00	3.84E-04 +/- 1.63E-05
m	15	336.35	2.32E+00 +/- 2.49E-01	1.22E+00	3.81E-04 +/- 1.61E-05
M	16	342.27	8.97E-01 +/- 1.66E-01	1.22E+00	3.76E-04 +/- 1.58E-05
m	17	345.58	6.22E+00 +/- 4.53E-01	1.21E+00	3.73E-04 +/- 1.56E-05
	18	375.68	1.24E+01 +/- 5.98E-01	1.20E+00	3.46E-04 +/- 1.41E-05
M	19	380.92	2.57E+00 +/- 2.57E-01	1.20E+00	3.42E-04 +/- 1.38E-05
m	20	383.42	2.90E+00 +/- 2.63E-01	1.20E+00	3.40E-04 +/- 1.37E-05
	21	393.53	5.81E+00 +/- 3.32E-01	1.19E+00	3.32E-04 +/- 1.34E-05
	22	413.70	1.48E+01 +/- 4.34E-01	1.19E+00	3.16E-04 +/- 1.28E-05
	23	423.29	1.18E+00 +/- 1.71E-01	1.18E+00	3.09E-04 +/- 1.26E-05
	24	452.14	1.51E+00 +/- 1.82E-01	1.18E+00	2.89E-04 +/- 1.20E-05
	25	662.42	6.63E-01 +/- 1.01E-01	1.15E+00	1.95E-04 +/- 9.62E-06
	26	722.01	3.63E-01 +/- 8.33E-02	1.14E+00	1.79E-04 +/- 8.87E-06
	27	964.13	4.19E-02 +/- 3.19E-02	1.12E+00	1.39E-04 +/- 5.75E-06
	28	2236.00	1.00E+02 +/- 1.52E+00	1.08E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 98.51 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.253 +/- 0.0327
SE-75	264.65	0.000 +/- 0.0000	0.600 +/- 0.0238
SE-75	279.53	0.000 +/- 0.0000	0.562 +/- 0.0434
SE-75	400.65	0.000 +/- 0.0000	0.645 +/- 0.0643

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.05	1.14E+01 +/- 7.20E-01	2.35E+00	1.18E-07 +/- 7.24E-07
	2	50.24	7.31E+00 +/- 1.36E+00	1.89E+00	1.09E-05 +/- 2.71E-05
	3	60.18	4.37E+02 +/- 6.05E+00	1.81E+00	3.62E-05 +/- 5.76E-05
	4	99.38	1.71E+02 +/- 3.70E+00	1.67E+00	2.64E-04 +/- 6.34E-05
	5	111.70	3.60E+01 +/- 2.14E+00	1.65E+00	3.35E-04 +/- 3.62E-05
	6	116.31	1.91E+01 +/- 2.88E+00	1.64E+00	3.58E-04 +/- 2.82E-05
M	7	125.97	2.43E+01 +/- 8.65E-01	1.62E+00	4.00E-04 +/- 2.37E-05
m	8	129.98	1.59E+02 +/- 2.92E+00	1.62E+00	4.14E-04 +/- 2.68E-05
	9	148.57	1.90E+01 +/- 1.27E+00	1.55E+00	4.63E-04 +/- 4.66E-05
	10	172.10	6.31E+00 +/- 1.27E+00	1.45E+00	4.88E-04 +/- 5.77E-05
	11	179.76	2.82E+00 +/- 1.12E+00	1.42E+00	4.90E-04 +/- 5.79E-05
	12	190.00	4.12E+00 +/- 9.66E-01	1.39E+00	4.89E-04 +/- 5.65E-05
	13	196.37	8.60E+00 +/- 1.11E+00	1.37E+00	4.87E-04 +/- 5.48E-05
	14	208.66	1.01E+02 +/- 2.20E+00	1.33E+00	4.80E-04 +/- 5.05E-05
	15	238.24	1.03E+00 +/- 5.77E-01	1.26E+00	4.54E-04 +/- 3.78E-05
	16	244.70	3.27E+00 +/- 1.08E+00	1.25E+00	4.48E-04 +/- 3.50E-05
	17	256.05	5.93E+00 +/- 8.90E-01	1.22E+00	4.36E-04 +/- 3.06E-05
M	18	264.49	1.39E+00 +/- 3.46E-01	1.21E+00	4.27E-04 +/- 2.76E-05
m	19	268.16	4.57E+00 +/- 6.17E-01	1.21E+00	4.23E-04 +/- 2.64E-05
	20	298.11	3.86E+00 +/- 9.39E-01	1.22E+00	3.91E-04 +/- 1.92E-05
	21	311.90	6.53E+00 +/- 8.94E-01	1.22E+00	3.77E-04 +/- 1.75E-05
M	22	321.58	4.15E+00 +/- 5.41E-01	1.21E+00	3.68E-04 +/- 1.69E-05
m	23	324.09	5.81E+00 +/- 6.12E-01	1.21E+00	3.66E-04 +/- 1.68E-05
M	24	333.35	4.55E+01 +/- 1.20E+00	1.21E+00	3.57E-04 +/- 1.65E-05
m	25	336.28	1.84E+01 +/- 6.33E-01	1.20E+00	3.54E-04 +/- 1.65E-05
M	26	342.09	3.82E+00 +/- 3.33E-01	1.20E+00	3.49E-04 +/- 1.65E-05
m	27	345.62	3.78E+01 +/- 1.14E+00	1.20E+00	3.46E-04 +/- 1.65E-05
	28	375.66	7.05E+01 +/- 1.74E+00	1.19E+00	3.21E-04 +/- 1.71E-05
M	29	380.82	1.83E+01 +/- 7.01E-01	1.18E+00	3.17E-04 +/- 1.72E-05
m	30	383.41	1.61E+01 +/- 6.21E-01	1.18E+00	3.15E-04 +/- 1.73E-05
	31	393.53	3.64E+01 +/- 8.93E-01	1.18E+00	3.08E-04 +/- 1.75E-05
	32	413.70	9.54E+01 +/- 1.60E+00	1.17E+00	2.94E-04 +/- 1.78E-05
	33	423.17	4.71E+00 +/- 3.83E-01	1.17E+00	2.87E-04 +/- 1.79E-05
	34	446.45	5.59E-01 +/- 3.08E-01	1.17E+00	2.73E-04 +/- 1.78E-05
	35	452.05	1.08E+01 +/- 4.75E-01	1.17E+00	2.70E-04 +/- 1.78E-05
	36	598.08	2.17E-01 +/- 9.02E-02	1.14E+00	2.08E-04 +/- 1.35E-05
	37	619.34	9.91E-01 +/- 1.77E-01	1.14E+00	2.02E-04 +/- 1.27E-05
	38	646.45	2.37E-01 +/- 1.24E-01	1.14E+00	1.94E-04 +/- 1.18E-05
	39	652.96	4.30E-01 +/- 1.80E-01	1.14E+00	1.93E-04 +/- 1.16E-05
M	40	659.34	3.17E-01 +/- 8.49E-02	1.14E+00	1.91E-04 +/- 1.14E-05
m	41	662.99	4.26E+00 +/- 3.42E-01	1.14E+00	1.90E-04 +/- 1.13E-05
	42	689.45	5.93E-01 +/- 1.03E-01	1.13E+00	1.84E-04 +/- 1.05E-05

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
M	43	718.32	2.04E-01 +/- 5.49E-02	1.13E+00	1.78E-04 +/- 9.68E-06
m	44	722.61	2.53E+00 +/- 2.43E-01	1.13E+00	1.77E-04 +/- 9.58E-06
	45	769.87	6.25E-01 +/- 9.88E-02	1.12E+00	1.68E-04 +/- 8.56E-06
	46	778.90	4.95E-02 +/- 3.89E-02	1.12E+00	1.66E-04 +/- 8.40E-06
	47	2236.00	1.00E+02 +/- 1.61E+00	1.07E+00	7.00E-05 +/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 84.06 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.285 +/- 0.0192
SE-75	279.53	0.000 +/- 0.0000	0.218 +/- 0.0380
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.09	3.04E+01 +/- 1.25E+00	4.10E+00	2.82E-07 +/- 1.86E-06
	2	50.21	1.40E+01 +/- 2.04E+00	4.10E+00	1.63E-05 +/- 4.38E-05
	3	60.16	1.06E+03 +/- 1.45E+01	4.10E+00	4.79E-05 +/- 8.23E-05
	4	99.35	3.64E+02 +/- 6.61E+00	4.10E+00	2.77E-04 +/- 7.11E-05
	5	111.66	7.10E+01 +/- 3.26E+00	4.10E+00	3.41E-04 +/- 3.83E-05
	6	116.26	4.20E+01 +/- 4.34E+00	4.10E+00	3.61E-04 +/- 2.89E-05
M	7	125.90	4.56E+01 +/- 1.31E+00	4.10E+00	3.97E-04 +/- 2.36E-05
m	8	129.94	3.31E+02 +/- 5.42E+00	4.10E+00	4.09E-04 +/- 2.72E-05
	9	148.57	3.84E+01 +/- 2.15E+00	2.92E+00	4.48E-04 +/- 4.84E-05
	10	161.48	8.04E+00 +/- 1.91E+00	2.52E+00	4.62E-04 +/- 5.67E-05
	11	172.05	1.34E+01 +/- 1.98E+00	2.31E+00	4.67E-04 +/- 5.93E-05
	12	179.83	7.46E+00 +/- 1.57E+00	2.19E+00	4.67E-04 +/- 5.93E-05
	13	189.91	1.28E+01 +/- 1.80E+00	2.07E+00	4.65E-04 +/- 5.77E-05
	14	196.25	1.34E+01 +/- 1.88E+00	2.00E+00	4.63E-04 +/- 5.58E-05
	15	204.16	5.42E+01 +/- 1.92E+00	1.93E+00	4.59E-04 +/- 5.30E-05
	16	208.64	1.64E+02 +/- 3.66E+00	1.89E+00	4.56E-04 +/- 5.12E-05

	17	225.68	2.37E+00	+/-	1.23E+00	1.76E+00	4.42E-04	+/-	4.36E-05
	18	244.70	5.38E+00	+/-	1.38E+00	1.65E+00	4.25E-04	+/-	3.51E-05
	19	256.00	1.38E+01	+/-	1.47E+00	1.59E+00	4.14E-04	+/-	3.05E-05
M	20	264.52	4.15E+00	+/-	5.43E-01	1.55E+00	4.06E-04	+/-	2.74E-05
m	21	268.17	9.51E+00	+/-	8.60E-01	1.58E+00	4.03E-04	+/-	2.62E-05
	22	285.76	1.80E+00	+/-	1.04E+00	1.68E+00	3.86E-04	+/-	2.13E-05
M	23	298.10	6.53E+00	+/-	7.57E-01	1.67E+00	3.74E-04	+/-	1.90E-05
m	24	300.55	1.25E+00	+/-	3.68E-01	1.67E+00	3.72E-04	+/-	1.86E-05
	25	311.90	1.04E+01	+/-	1.24E+00	1.66E+00	3.62E-04	+/-	1.74E-05
M	26	321.54	8.71E+00	+/-	7.88E-01	1.65E+00	3.53E-04	+/-	1.69E-05
m	27	324.04	1.32E+01	+/-	9.29E-01	1.65E+00	3.51E-04	+/-	1.68E-05
M	28	333.29	8.60E+01	+/-	1.95E+00	1.64E+00	3.43E-04	+/-	1.67E-05
m	29	336.26	2.89E+01	+/-	9.12E-01	1.64E+00	3.41E-04	+/-	1.67E-05
	30	345.60	6.70E+01	+/-	1.45E+00	1.63E+00	3.34E-04	+/-	1.69E-05
	31	375.62	1.47E+02	+/-	2.95E+00	1.60E+00	3.11E-04	+/-	1.79E-05
M	32	380.76	3.26E+01	+/-	1.04E+00	1.60E+00	3.08E-04	+/-	1.81E-05
m	33	383.34	3.28E+01	+/-	1.01E+00	1.60E+00	3.06E-04	+/-	1.82E-05
	34	393.46	7.17E+01	+/-	1.51E+00	1.59E+00	2.99E-04	+/-	1.85E-05
	35	413.70	1.91E+02	+/-	2.97E+00	1.58E+00	2.86E-04	+/-	1.90E-05
	36	423.12	9.13E+00	+/-	6.46E-01	1.57E+00	2.81E-04	+/-	1.91E-05
	37	451.99	2.28E+01	+/-	7.07E-01	1.55E+00	2.65E-04	+/-	1.91E-05
	38	482.31	4.96E-01	+/-	2.83E-01	1.53E+00	2.50E-04	+/-	1.87E-05
	39	619.42	2.27E+00	+/-	2.46E-01	1.46E+00	2.01E-04	+/-	1.37E-05
	40	633.48	1.89E-01	+/-	1.15E-01	1.46E+00	1.97E-04	+/-	1.32E-05
	41	646.50	7.27E-01	+/-	2.17E-01	1.45E+00	1.94E-04	+/-	1.27E-05
	42	653.37	1.00E+00	+/-	2.44E-01	1.45E+00	1.92E-04	+/-	1.24E-05

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
M	43	659.53	5.22E-01 +/- 1.10E-01	1.45E+00	1.91E-04 +/- 1.22E-05
m	44	662.97	9.38E+00 +/- 5.42E-01	1.44E+00	1.90E-04 +/- 1.20E-05
	45	689.06	6.56E-01 +/- 1.48E-01	1.43E+00	1.84E-04 +/- 1.11E-05
	46	704.66	2.49E-01 +/- 1.24E-01	1.43E+00	1.80E-04 +/- 1.06E-05
M	47	718.23	2.66E-01 +/- 6.81E-02	1.42E+00	1.77E-04 +/- 1.02E-05
m	48	722.49	4.95E+00 +/- 3.85E-01	1.42E+00	1.76E-04 +/- 1.01E-05
	49	738.42	2.34E-01 +/- 9.84E-02	1.42E+00	1.73E-04 +/- 9.61E-06
	50	756.68	4.07E-01 +/- 1.39E-01	1.41E+00	1.70E-04 +/- 9.13E-06
	51	769.92	1.27E+00 +/- 1.52E-01	1.41E+00	1.67E-04 +/- 8.82E-06
	52	778.90	1.25E-01 +/- 7.12E-02	1.40E+00	1.66E-04 +/- 8.62E-06
	53	964.13	1.15E-01 +/- 4.84E-02	1.35E+00	1.39E-04 +/- 6.40E-06
	54	1408.01	5.86E-02 +/- 2.62E-02	1.28E+00	1.00E-04 +/- 6.78E-06
	55	2236.00	1.00E+02 +/- 1.70E+00	1.23E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 84.17 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.274 +/- 0.0185
SE-75	279.53	0.000 +/- 0.0000	0.233 +/- 0.0463
SE-75	400.65	0.000 +/- 0.0000	0.407 +/- 0.0715

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.08	2.88E+01 +/- 1.27E+00	4.10E+00	4.76E-07 +/- 2.98E-06
	2	49.94	6.76E+00 +/- 1.86E+00	4.10E+00	2.14E-05 +/- 5.56E-05
	3	60.16	9.94E+02 +/- 1.36E+01	4.10E+00	6.07E-05 +/- 9.93E-05
	4	99.34	3.59E+02 +/- 6.54E+00	4.10E+00	3.06E-04 +/- 7.50E-05
	5	111.66	7.16E+01 +/- 3.23E+00	4.10E+00	3.68E-04 +/- 4.00E-05
	6	116.33	4.51E+01 +/- 4.30E+00	4.10E+00	3.88E-04 +/- 3.03E-05
M	7	125.92	4.74E+01 +/- 1.34E+00	4.10E+00	4.21E-04 +/- 2.46E-05
m	8	129.94	3.31E+02 +/- 5.41E+00	4.10E+00	4.33E-04 +/- 2.80E-05
	9	148.57	4.32E+01 +/- 2.03E+00	2.95E+00	4.69E-04 +/- 4.84E-05

	10	161.44	2.85E+00	+/-	1.70E+00	2.54E+00	4.81E-04	+/-	5.63E-05
	11	171.98	1.77E+01	+/-	1.98E+00	2.33E+00	4.85E-04	+/-	5.88E-05
	12	179.84	8.40E+00	+/-	1.68E+00	2.21E+00	4.85E-04	+/-	5.88E-05
	13	189.96	9.92E+00	+/-	1.37E+00	2.09E+00	4.82E-04	+/-	5.72E-05
	14	196.28	1.19E+01	+/-	1.87E+00	2.02E+00	4.80E-04	+/-	5.54E-05
	15	208.64	2.09E+02	+/-	3.83E+00	1.91E+00	4.72E-04	+/-	5.09E-05
	16	244.70	4.83E+00	+/-	1.22E+00	1.67E+00	4.43E-04	+/-	3.54E-05
	17	255.91	1.19E+01	+/-	1.32E+00	1.61E+00	4.33E-04	+/-	3.10E-05
M	18	264.41	4.41E+00	+/-	5.66E-01	1.57E+00	4.25E-04	+/-	2.80E-05
m	19	268.07	1.05E+01	+/-	9.11E-01	1.59E+00	4.22E-04	+/-	2.68E-05
	20	279.54	1.48E+00	+/-	9.04E-01	1.65E+00	4.11E-04	+/-	2.35E-05
M	21	298.11	5.78E+00	+/-	7.28E-01	1.60E+00	3.94E-04	+/-	1.97E-05
m	22	300.61	1.22E+00	+/-	3.63E-01	1.59E+00	3.92E-04	+/-	1.93E-05
m	23	303.27	1.39E+00	+/-	3.78E-01	1.58E+00	3.90E-04	+/-	1.90E-05
	24	311.90	9.13E+00	+/-	1.02E+00	1.56E+00	3.82E-04	+/-	1.81E-05
M	25	321.62	8.53E+00	+/-	7.40E-01	1.54E+00	3.74E-04	+/-	1.75E-05
m	26	324.00	1.21E+01	+/-	8.54E-01	1.53E+00	3.72E-04	+/-	1.74E-05
M	27	333.31	8.51E+01	+/-	1.95E+00	1.51E+00	3.65E-04	+/-	1.73E-05
m	28	336.25	2.84E+01	+/-	9.03E-01	1.50E+00	3.63E-04	+/-	1.73E-05
M	29	342.04	7.79E+00	+/-	4.83E-01	1.49E+00	3.58E-04	+/-	1.74E-05
m	30	345.57	7.75E+01	+/-	1.86E+00	1.48E+00	3.55E-04	+/-	1.74E-05
	31	368.81	2.71E+01	+/-	1.28E+00	1.44E+00	3.38E-04	+/-	1.82E-05
	32	375.61	1.39E+02	+/-	2.93E+00	1.42E+00	3.34E-04	+/-	1.84E-05
M	33	380.78	3.49E+01	+/-	1.08E+00	1.41E+00	3.30E-04	+/-	1.86E-05
m	34	383.32	3.29E+01	+/-	1.00E+00	1.41E+00	3.28E-04	+/-	1.87E-05
	35	393.47	7.27E+01	+/-	1.49E+00	1.39E+00	3.22E-04	+/-	1.90E-05
	36	400.66	1.03E+00	+/-	4.43E-01	1.38E+00	3.17E-04	+/-	1.92E-05
	37	413.70	1.91E+02	+/-	2.98E+00	1.37E+00	3.09E-04	+/-	1.95E-05
	38	423.17	1.06E+01	+/-	7.25E-01	1.37E+00	3.04E-04	+/-	1.96E-05
	39	452.02	2.28E+01	+/-	7.26E-01	1.36E+00	2.88E-04	+/-	1.97E-05
	40	481.86	4.57E-01	+/-	2.48E-01	1.35E+00	2.74E-04	+/-	1.93E-05
	41	512.26	4.34E-01	+/-	2.26E-01	1.34E+00	2.60E-04	+/-	1.85E-05
	42	619.42	1.76E+00	+/-	2.43E-01	1.30E+00	2.22E-04	+/-	1.43E-05

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
	43	640.62	1.05E+00 +/- 2.13E-01	1.30E+00	2.16E-04 +/- 1.35E-05
	44	646.45	5.10E-01 +/- 2.33E-01	1.29E+00	2.15E-04 +/- 1.32E-05
	45	653.11	1.57E+00 +/- 2.06E-01	1.29E+00	2.13E-04 +/- 1.30E-05
M	46	659.42	5.38E-01 +/- 1.17E-01	1.29E+00	2.11E-04 +/- 1.27E-05
m	47	662.97	9.47E+00 +/- 5.46E-01	1.29E+00	2.10E-04 +/- 1.26E-05
	48	689.31	7.00E-01 +/- 1.42E-01	1.28E+00	2.03E-04 +/- 1.16E-05
	49	704.25	2.40E-01 +/- 1.23E-01	1.28E+00	2.00E-04 +/- 1.11E-05
	50	722.01	4.55E+00 +/- 2.82E-01	1.28E+00	1.95E-04 +/- 1.05E-05
	51	738.13	1.94E-01 +/- 8.61E-02	1.27E+00	1.92E-04 +/- 1.00E-05
	52	756.55	3.24E-01 +/- 1.28E-01	1.27E+00	1.88E-04 +/- 9.54E-06
	53	769.67	1.46E+00 +/- 1.50E-01	1.27E+00	1.85E-04 +/- 9.21E-06
	54	964.13	4.98E-02 +/- 3.85E-02	1.23E+00	1.51E-04 +/- 6.52E-06
	55	2236.00	1.00E+02 +/- 1.71E+00	1.15E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 95.31 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.333 +/- 0.0186
SE-75	279.53	0.000 +/- 0.0000	0.338 +/- 0.0425
SE-75	400.65	0.000 +/- 0.0000	0.397 +/- 0.0671

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.15	1.75E+01 +/- 9.32E-01	2.27E+00	5.23E-09 +/- 2.98E-08
	2	50.24	1.44E+01 +/- 1.97E+00	1.85E+00	2.99E-06 +/- 6.98E-06
	3	60.17	6.77E+02 +/- 9.09E+00	1.77E+00	1.60E-05 +/- 2.39E-05
	4	99.39	2.11E+02 +/- 4.30E+00	1.63E+00	2.43E-04 +/- 5.52E-05
	5	111.68	4.80E+01 +/- 2.38E+00	1.61E+00	3.35E-04 +/- 3.49E-05
	6	116.24	2.38E+01 +/- 3.16E+00	1.61E+00	3.66E-04 +/- 2.83E-05
M	7	125.96	2.79E+01 +/- 9.53E-01	1.59E+00	4.24E-04 +/- 2.46E-05
m	8	129.97	1.99E+02 +/- 3.47E+00	1.59E+00	4.45E-04 +/- 2.77E-05
	9	148.57	2.26E+01 +/- 1.58E+00	1.57E+00	5.16E-04 +/- 4.85E-05

	10	172.11	1.16E+01	+/-	1.51E+00	1.55E+00	5.55E-04	+/-	6.09E-05
	11	179.67	3.65E+00	+/-	1.12E+00	1.54E+00	5.58E-04	+/-	6.12E-05
	12	189.99	6.84E+00	+/-	1.36E+00	1.53E+00	5.58E-04	+/-	5.97E-05
	13	196.28	6.41E+00	+/-	1.11E+00	1.53E+00	5.56E-04	+/-	5.79E-05
	14	208.66	1.17E+02	+/-	2.45E+00	1.52E+00	5.47E-04	+/-	5.32E-05
	15	255.94	7.03E+00	+/-	8.25E-01	1.48E+00	4.90E-04	+/-	3.18E-05
M	16	264.58	2.33E+00	+/-	4.03E-01	1.48E+00	4.78E-04	+/-	2.86E-05
m	17	268.12	6.40E+00	+/-	6.90E-01	1.47E+00	4.74E-04	+/-	2.74E-05
	18	298.10	4.57E+00	+/-	9.92E-01	1.45E+00	4.34E-04	+/-	2.02E-05
	19	311.90	5.80E+00	+/-	7.34E-01	1.45E+00	4.17E-04	+/-	1.86E-05
M	20	321.60	4.53E+00	+/-	6.12E-01	1.44E+00	4.05E-04	+/-	1.79E-05
m	21	323.95	7.08E+00	+/-	7.31E-01	1.44E+00	4.02E-04	+/-	1.78E-05
M	22	333.31	4.94E+01	+/-	1.32E+00	1.43E+00	3.92E-04	+/-	1.76E-05
m	23	336.27	1.54E+01	+/-	6.19E-01	1.43E+00	3.88E-04	+/-	1.76E-05
M	24	342.10	5.09E+00	+/-	3.67E-01	1.43E+00	3.82E-04	+/-	1.76E-05
m	25	345.61	4.32E+01	+/-	1.24E+00	1.42E+00	3.78E-04	+/-	1.76E-05
	26	368.81	1.56E+01	+/-	9.33E-01	1.41E+00	3.55E-04	+/-	1.81E-05
	27	375.65	7.72E+01	+/-	1.91E+00	1.41E+00	3.49E-04	+/-	1.82E-05
M	28	380.79	2.00E+01	+/-	7.45E-01	1.40E+00	3.44E-04	+/-	1.83E-05
m	29	383.38	1.92E+01	+/-	7.04E-01	1.40E+00	3.42E-04	+/-	1.84E-05
	30	393.48	3.98E+01	+/-	9.85E-01	1.40E+00	3.33E-04	+/-	1.86E-05
	31	413.70	1.09E+02	+/-	1.78E+00	1.39E+00	3.17E-04	+/-	1.88E-05
	32	423.17	6.02E+00	+/-	4.53E-01	1.38E+00	3.10E-04	+/-	1.88E-05
	33	446.13	5.01E-01	+/-	3.25E-01	1.37E+00	2.94E-04	+/-	1.87E-05
	34	452.03	1.26E+01	+/-	5.00E-01	1.37E+00	2.90E-04	+/-	1.86E-05
	35	619.53	9.74E-01	+/-	1.46E-01	1.31E+00	2.15E-04	+/-	1.32E-05
	36	646.27	3.36E-01	+/-	1.87E-01	1.30E+00	2.08E-04	+/-	1.23E-05
M	37	659.46	4.64E-01	+/-	8.53E-02	1.30E+00	2.04E-04	+/-	1.18E-05
m	38	662.98	5.36E+00	+/-	3.72E-01	1.30E+00	2.03E-04	+/-	1.17E-05
	39	688.98	6.62E-01	+/-	1.13E-01	1.29E+00	1.96E-04	+/-	1.09E-05
M	40	718.13	1.16E-01	+/-	4.34E-02	1.29E+00	1.90E-04	+/-	1.01E-05
m	41	722.57	2.75E+00	+/-	2.62E-01	1.28E+00	1.89E-04	+/-	9.98E-06
	42	769.71	8.40E-01	+/-	1.10E-01	1.27E+00	1.79E-04	+/-	8.91E-06

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	1001.03	6.06E-02 +/- 3.09E-02	1.23E+00	1.45E-04 +/- 6.33E-06
44	2236.00	1.00E+02 +/- 1.62E+00	1.16E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 107.97 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.298 +/- 0.0254
SE-75	264.65	0.000 +/- 0.0000	0.574 +/- 0.0182
SE-75	279.53	0.000 +/- 0.0000	0.574 +/- 0.0325
SE-75	400.65	0.000 +/- 0.0000	0.641 +/- 0.0430

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.17	7.00E+00 +/- 5.33E-01	2.15E+00	7.81E-06 +/- 7.56E-06
	2	50.03	4.82E+00 +/- 1.16E+00	1.77E+00	5.94E-05 +/- 2.93E-05
	3	60.19	2.02E+02 +/- 2.99E+00	1.70E+00	1.10E-04 +/- 3.84E-05
	4	99.42	6.21E+01 +/- 2.00E+00	1.58E+00	3.25E-04 +/- 3.30E-05
	5	111.70	1.22E+01 +/- 1.33E+00	1.56E+00	3.75E-04 +/- 2.72E-05
	6	116.09	8.49E+00 +/- 1.65E+00	1.55E+00	3.90E-04 +/- 2.56E-05
M	7	125.99	9.80E+00 +/- 5.29E-01	1.54E+00	4.19E-04 +/- 2.31E-05
m	8	130.02	5.86E+01 +/- 1.47E+00	1.54E+00	4.29E-04 +/- 2.26E-05
	9	148.57	7.66E+00 +/- 8.17E-01	1.48E+00	4.62E-04 +/- 2.28E-05
	10	171.77	2.65E+00 +/- 9.49E-01	1.41E+00	4.80E-04 +/- 2.51E-05
	11	180.00	1.26E+00 +/- 8.09E-01	1.39E+00	4.81E-04 +/- 2.57E-05
	12	196.49	2.73E+00 +/- 8.23E-01	1.35E+00	4.79E-04 +/- 2.62E-05
	13	204.20	9.51E+00 +/- 6.44E-01	1.34E+00	4.76E-04 +/- 2.61E-05
	14	208.67	2.66E+01 +/- 1.18E+00	1.33E+00	4.74E-04 +/- 2.60E-05
	15	256.07	9.31E-01 +/- 5.72E-01	1.24E+00	4.39E-04 +/- 2.28E-05
	16	268.30	1.06E+00 +/- 7.02E-01	1.23E+00	4.28E-04 +/- 2.17E-05
	17	279.54	1.13E+00 +/- 6.00E-01	1.23E+00	4.18E-04 +/- 2.07E-05
	18	298.05	1.65E+00 +/- 5.85E-01	1.22E+00	4.01E-04 +/- 1.90E-05
M	19	308.74	8.12E-01 +/- 2.28E-01	1.21E+00	3.91E-04 +/- 1.81E-05
m	20	312.50	1.97E+00 +/- 3.72E-01	1.21E+00	3.88E-04 +/- 1.78E-05
	21	324.08	3.04E+00 +/- 5.79E-01	1.21E+00	3.77E-04 +/- 1.69E-05
M	22	333.38	1.43E+01 +/- 6.35E-01	1.20E+00	3.69E-04 +/- 1.62E-05
m	23	336.30	4.97E+00 +/- 3.22E-01	1.20E+00	3.67E-04 +/- 1.60E-05

	24	341.88	5.35E+00	+/-	5.56E-01	1.20E+00	3.62E-04	+/- 1.57E-05
	25	345.67	7.01E+00	+/-	4.54E-01	1.20E+00	3.59E-04	+/- 1.54E-05
	26	375.71	2.19E+01	+/-	8.41E-01	1.19E+00	3.34E-04	+/- 1.38E-05
M	27	380.86	5.41E+00	+/-	3.63E-01	1.19E+00	3.30E-04	+/- 1.36E-05
m	28	383.45	5.10E+00	+/-	3.41E-01	1.18E+00	3.28E-04	+/- 1.35E-05
	29	393.52	1.06E+01	+/-	4.39E-01	1.18E+00	3.21E-04	+/- 1.31E-05
	30	413.70	2.98E+01	+/-	6.82E-01	1.18E+00	3.06E-04	+/- 1.25E-05
	31	423.18	1.68E+00	+/-	1.97E-01	1.17E+00	3.00E-04	+/- 1.22E-05
	32	443.98	2.12E-01	+/-	1.54E-01	1.17E+00	2.87E-04	+/- 1.18E-05
	33	452.06	3.69E+00	+/-	2.28E-01	1.17E+00	2.82E-04	+/- 1.16E-05
	34	619.63	1.18E-01	+/-	8.05E-02	1.14E+00	2.06E-04	+/- 9.86E-06
	35	662.42	1.53E+00	+/-	1.52E-01	1.14E+00	1.93E-04	+/- 9.41E-06
	36	689.31	1.56E-01	+/-	6.82E-02	1.13E+00	1.86E-04	+/- 9.10E-06
	37	722.01	6.69E-01	+/-	9.99E-02	1.13E+00	1.78E-04	+/- 8.71E-06
	38	769.63	1.65E-01	+/-	6.28E-02	1.13E+00	1.68E-04	+/- 8.12E-06
	39	778.90	2.02E-02	+/-	1.85E-02	1.13E+00	1.66E-04	+/- 8.00E-06
	40	2236.00	1.00E+02	+/-	1.54E+00	1.07E+00	1.19E-04	+/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 112.63 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.376 +/- 0.0190
SE-75	264.65	0.000 +/- 0.0000	0.575 +/- 0.0167
SE-75	279.53	0.000 +/- 0.0000	0.588 +/- 0.0265
SE-75	400.65	0.000 +/- 0.0000	0.639 +/- 0.0354

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.00	2.29E+00 +/- 2.92E-01	1.90E+00	6.05E-09 +/- 3.65E-08
2	60.15	3.01E+01 +/- 8.70E-01	1.55E+00	1.65E-05 +/- 2.58E-05
3	67.80	8.54E-01 +/- 4.37E-01	1.52E+00	3.91E-05 +/- 4.35E-05
4	95.26	1.58E+00 +/- 9.26E-01	1.46E+00	2.06E-04 +/- 6.13E-05
5	99.31	2.65E+00 +/- 1.06E+00	1.45E+00	2.35E-04 +/- 5.59E-05
6	111.34	1.65E+00 +/- 8.10E-01	1.44E+00	3.19E-04 +/- 3.52E-05
7	129.29	2.25E+00 +/- 5.31E-01	1.42E+00	4.21E-04 +/- 2.66E-05
8	208.74	1.01E+00 +/- 4.04E-01	1.29E+00	5.11E-04 +/- 5.15E-05
9	375.40	3.74E-01 +/- 1.60E-01	1.19E+00	3.18E-04 +/- 1.78E-05
10	393.83	3.83E-01 +/- 1.39E-01	1.18E+00	3.03E-04 +/- 1.81E-05
11	413.70	7.66E-01 +/- 1.31E-01	1.18E+00	2.88E-04 +/- 1.83E-05
12	662.42	5.69E-02 +/- 3.05E-02	1.14E+00	1.84E-04 +/- 1.12E-05
13	1001.03	8.76E-02 +/- 2.77E-02	1.11E+00	1.35E-04 +/- 6.06E-06

14	1408.01	2.79E-02	+/-	1.93E-02	1.09E+00	1.05E-04	+/- 6.90E-06
15	2236.00	1.00E+02	+/-	1.50E+00	1.07E+00	6.12E-05	+/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 113.29 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.344 +/- 0.0170
SE-75	264.65	0.000 +/- 0.0000	0.547 +/- 0.0161
SE-75	279.53	0.000 +/- 0.0000	0.530 +/- 0.0226
SE-75	400.65	0.000 +/- 0.0000	0.613 +/- 0.0344

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.10	1.87E+00 +/- 2.34E-01	1.99E+00	1.68E-05 +/- 1.66E-05
2	49.80	8.09E-01 +/- 4.57E-01	1.67E+00	8.29E-05 +/- 4.19E-05
3	60.15	1.30E+01 +/- 6.12E-01	1.60E+00	1.37E-04 +/- 4.88E-05
4	67.84	8.21E-01 +/- 4.51E-01	1.57E+00	1.79E-04 +/- 4.97E-05
5	121.11	9.27E-01 +/- 5.21E-01	1.47E+00	3.97E-04 +/- 2.38E-05
6	867.39	1.76E-02 +/- 1.24E-02	1.13E+00	1.60E-04 +/- 7.45E-06
7	964.13	2.69E-02 +/- 2.00E-02	1.12E+00	1.45E-04 +/- 6.11E-06
8	1408.01	2.47E-02 +/- 2.10E-02	1.10E+00	1.09E-04 +/- 6.83E-06
9	2236.00	1.00E+02 +/- 1.51E+00	1.08E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 113.54 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.267 +/- 0.0146
SE-75	264.65	0.000 +/- 0.0000	0.371 +/- 0.0128
SE-75	279.53	0.000 +/- 0.0000	0.413 +/- 0.0205
SE-75	400.65	0.000 +/- 0.0000	0.467 +/- 0.0299

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.22	5.62E-01 +/- 1.61E-01	2.28E+00	1.31E-03 +/- 8.40E-03
M	2	58.00	2.82E+00 +/- 3.11E-01	1.78E+00	5.18E-04 +/- 9.60E-04
m	3	60.02	4.16E+00 +/- 3.78E-01	1.77E+00	5.04E-04 +/- 8.54E-04
	4	291.45	3.93E-01 +/- 2.14E-01	1.37E+00	3.61E-04 +/- 1.92E-05
	5	413.70	1.57E-01 +/- 7.11E-02	1.31E+00	3.08E-04 +/- 1.94E-05
	6	512.01	3.13E-01 +/- 7.68E-02	1.28E+00	2.67E-04 +/- 1.91E-05
	7	964.13	5.22E-02 +/- 2.13E-02	1.19E+00	1.45E-04 +/- 6.48E-06
	8	1112.12	3.26E-02 +/- 2.28E-02	1.18E+00	1.23E-04 +/- 5.40E-06
	9	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.77 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.100 +/- 0.0118
SE-75	264.65	0.000 +/- 0.0000	0.163 +/- 0.0078
SE-75	279.53	0.000 +/- 0.0000	0.157 +/- 0.0143
SE-75	400.65	0.000 +/- 0.0000	0.205 +/- 0.0201

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.00	9.29E-01 +/- 1.89E-01	3.55E+00	2.32E-09 +/- 1.43E-08
2	49.99	2.16E+00 +/- 3.87E-01	2.67E+00	2.07E-06 +/- 5.23E-06
3	60.16	3.33E+00 +/- 3.90E-01	2.50E+00	1.30E-05 +/- 2.08E-05
4	279.54	4.40E-01 +/- 2.61E-01	1.86E+00	4.32E-04 +/- 2.38E-05
5	443.98	8.80E-02 +/- 5.20E-02	1.68E+00	2.67E-04 +/- 1.83E-05
6	662.42	6.13E-02 +/- 2.32E-02	1.54E+00	1.82E-04 +/- 1.13E-05
7	2236.00	1.00E+02 +/- 1.50E+00	1.28E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 114.00 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.348 +/- 0.0155
SE-75	264.65	0.000 +/- 0.0000	0.456 +/- 0.0136
SE-75	279.53	0.000 +/- 0.0000	0.495 +/- 0.0207
SE-75	400.65	0.000 +/- 0.0000	0.513 +/- 0.0310

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.19	4.74E-01 +/- 1.25E-01	1.98E+00	1.87E-08 +/- 1.21E-07
2	49.75	1.75E+00 +/- 3.28E-01	1.66E+00	4.73E-06 +/- 1.28E-05
3	60.21	1.57E+00 +/- 3.13E-01	1.59E+00	2.30E-05 +/- 3.89E-05
4	413.70	1.31E-01 +/- 6.31E-02	1.27E+00	2.89E-04 +/- 1.94E-05
5	1085.91	3.59E-02 +/- 2.10E-02	1.16E+00	1.32E-04 +/- 5.78E-06
6	1332.93	6.92E-02 +/- 3.82E-02	1.14E+00	1.11E-04 +/- 5.81E-06
7	2236.00	1.00E+02 +/- 1.50E+00	1.11E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 114.14 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.913 +/- 0.0254
SE-75	264.65	0.000 +/- 0.0000	0.949 +/- 0.0225
SE-75	279.53	0.000 +/- 0.0000	0.961 +/- 0.0301
SE-75	400.65	0.000 +/- 0.0000	0.983 +/- 0.0432

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.09	1.71E-01 +/- 1.07E-01	1.07E+00	3.52E-06 +/- 2.12E-05
2	60.16	9.42E-01 +/- 2.64E-01	1.04E+00	9.58E-05 +/- 1.50E-04
3	129.29	4.35E-01 +/- 2.94E-01	1.04E+00	4.20E-04 +/- 2.62E-05
4	511.86	1.09E-01 +/- 5.62E-02	1.01E+00	2.47E-04 +/- 1.68E-05
5	722.01	3.49E-02 +/- 1.74E-02	1.00E+00	1.81E-04 +/- 9.66E-06
6	867.39	6.27E-02 +/- 3.08E-02	1.00E+00	1.55E-04 +/- 7.11E-06
7	1085.91	2.61E-02 +/- 1.51E-02	1.00E+00	1.28E-04 +/- 5.58E-06
8	1112.12	1.89E-02 +/- 1.73E-02	1.00E+00	1.26E-04 +/- 5.44E-06
9	1408.01	3.49E-02 +/- 1.74E-02	1.00E+00	1.05E-04 +/- 7.02E-06
10	2236.00	1.00E+02 +/- 1.50E+00	1.00E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.20 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.906 +/- 0.0253
SE-75	264.65	0.000 +/- 0.0000	1.000 +/- 0.0000
SE-75	279.53	0.000 +/- 0.0000	0.992 +/- 0.0303
SE-75	400.65	0.000 +/- 0.0000	0.986 +/- 0.0434

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.21	3.44E-01 +/- 1.13E-01	1.07E+00	1.32E-09 +/- 8.26E-09
2	400.66	5.63E-02 +/- 3.68E-02	1.01E+00	2.70E-04 +/- 1.63E-05
3	1001.03	2.81E-02 +/- 1.92E-02	1.00E+00	1.29E-04 +/- 5.86E-06
4	1332.50	1.01E-01 +/- 3.33E-02	1.00E+00	9.75E-05 +/- 5.40E-06
5	2236.00	1.00E+02 +/- 1.49E+00	1.00E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.22 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.834 +/- 0.0240
SE-75	264.65	0.000 +/- 0.0000	0.961 +/- 0.0228
SE-75	279.53	0.000 +/- 0.0000	0.923 +/- 0.0287
SE-75	400.65	0.000 +/- 0.0000	0.947 +/- 0.0430

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	49.39	1.18E+00 +/- 2.55E-01	1.10E+00	2.90E-05 +/- 1.80E-05
2	136.00	4.02E-01 +/- 2.78E-01	1.02E+00	2.35E-04 +/- 1.45E-05
3	185.71	3.28E-01 +/- 2.45E-01	1.05E+00	2.63E-04 +/- 1.76E-05
4	311.90	1.65E-01 +/- 9.09E-02	1.03E+00	2.22E-04 +/- 1.24E-05
5	443.98	5.22E-02 +/- 2.13E-02	1.02E+00	1.68E-04 +/- 8.43E-06
6	964.13	3.76E-02 +/- 2.74E-02	1.01E+00	8.21E-05 +/- 4.35E-06
7	1085.91	2.78E-02 +/- 2.56E-02	1.01E+00	7.51E-05 +/- 3.53E-06
8	1112.12	2.44E-02 +/- 2.26E-02	1.01E+00	7.38E-05 +/- 3.43E-06
9	1173.91	1.52E-01 +/- 4.60E-02	1.01E+00	7.13E-05 +/- 3.33E-06
10	1408.01	2.39E-02 +/- 2.12E-02	1.01E+00	6.48E-05 +/- 4.76E-06
11	2236.00	1.00E+02 +/- 1.50E+00	1.01E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: S100-2381
Peak Locate Performed on: 8-22-07 9:39:54 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.82	0.1065	32.07	39.84
2	100.74	0.1545	50.03	14.23
3	121.00	0.0324	60.17	413.61
4	152.12	0.3119	75.73	5.05
5	199.40	0.0423	99.36	221.08
6	224.02	0.0611	111.68	114.26
7	233.21	0.0696	116.27	45.90
8	260.59	0.0424	129.96	224.07
9	299.15	0.0858	149.24	62.87
10	344.77	0.1620	172.05	17.90
11	360.28	0.1690	179.81	15.10
12	380.62	0.1532	189.98	17.15
13	393.27	0.1296	196.30	25.65
14	417.97	0.0438	208.65	217.36
15	488.43	0.2148	243.88	7.67
16	512.62	0.1167	255.98	28.67
17	537.00	0.1315	268.16	25.08
18	596.87	0.1512	298.10	19.36
19	625.54	0.1110	312.44	29.89
20	643.15	0.2046	321.60	11.28
21	648.89	0.1574	324.01	15.86
22	667.19	0.0608	333.32	110.25
23	673.74	0.1008	336.26	45.52
24	684.40	0.1520	342.06	20.45
25	691.89	0.0600	345.60	111.54
26	751.94	0.0457	375.64	189.77
27	761.95	0.0823	380.79	66.22
28	767.75	0.0918	383.36	54.52
29	787.64	0.0602	393.49	97.79
30	829.25	0.0453	414.29	179.93
31	847.00	0.0912	423.17	48.67
32	893.35	0.2207	446.34	7.47
33	904.71	0.0772	452.02	60.92
34	965.17	0.2693	482.25	5.45
35	1239.52	0.1528	619.43	14.12
36	1293.50	0.1601	646.42	13.24

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	1318.63	0.3160	659.44	6.29
38	1326.59	0.0942	662.98	37.87
39	1379.06	0.1921	689.19	10.06
40	1445.66	0.1119	722.50	27.12
41	1513.87	0.2216	756.60	7.04
42	1540.20	0.1827	769.77	10.42
43	2348.63	0.2247	1173.98	6.35
44	2667.01	0.2119	1333.17	6.41
45	4450.60	0.2294	2224.97	5.63
46	4471.87	0.0268	2235.60	397.14

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: S100-2381
Peak Analysis Performed on: 8-22-07 9:39:54 AM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	60-	71	64.82	32.07	1.07E+04	214.80	1.30E+04
2	94-	104	100.74	50.03	6.59E+03	366.25	5.19E+04
3	114-	127	121.00	60.17	3.21E+05	713.47	6.84E+04
4	145-	158	152.12	75.73	2.06E+03	420.76	6.27E+04
5	194-	203	199.40	99.36	1.09E+05	776.08	2.19E+05
6	217-	227	224.02	111.68	2.16E+04	545.17	1.13E+05
7	227-	240	233.21	116.27	1.19E+04	729.72	1.77E+05
8	256-	267	260.59	129.96	8.45E+04	504.91	6.64E+04
9	293-	304	299.15	149.24	1.17E+04	379.79	5.26E+04
10	338-	351	344.77	172.05	5.18E+03	374.47	4.89E+04
11	357-	367	360.28	179.81	2.47E+03	298.56	3.63E+04
12	376-	387	380.62	189.98	3.70E+03	314.15	3.78E+04
13	389-	400	393.27	196.30	4.46E+03	306.65	3.57E+04
14	413-	425	417.97	208.65	6.17E+04	452.83	5.25E+04
15	484-	495	488.43	243.88	1.84E+03	224.44	1.93E+04
16	508-	519	512.62	255.98	3.45E+03	218.18	1.75E+04
17	533-	541	537.00	268.16	1.95E+03	170.21	1.26E+04
18	592-	604	596.87	298.10	2.29E+03	199.93	1.43E+04
19	618-	630	625.54	312.44	3.45E+03	197.79	1.36E+04
M 20	638-	656	643.86	321.60	2.56E+03	138.34	1.20E+04
m 21	638-	656	648.69	324.01	3.62E+03	156.20	1.33E+04
M 22	659-	681	667.30	333.32	2.58E+04	264.99	1.02E+04
m 23	659-	681	673.18	336.26	8.56E+03	137.07	1.19E+04
M 24	681-	699	684.79	342.06	2.55E+03	82.61	6.25E+03
m 25	681-	699	691.86	345.60	2.31E+04	256.26	6.49E+03
26	746-	759	751.94	375.64	4.27E+04	363.77	2.92E+04
M 27	759-	775	762.26	380.79	1.04E+04	157.50	5.89E+03
m 28	759-	775	767.40	383.36	9.93E+03	147.90	4.50E+03
29	779-	795	787.64	393.49	2.14E+04	194.54	5.25E+03
30	821-	836	829.25	414.29	5.71E+04	260.61	3.59E+03
31	843-	852	847.00	423.17	2.89E+03	100.72	3.05E+03
32	890-	897	893.35	446.34	2.69E+02	45.39	8.88E+02
33	900-	912	904.71	452.02	6.93E+03	103.28	1.39E+03
34	960-	969	965.17	482.25	1.65E+02	40.31	6.46E+02
35	1231-	1247	1239.52	619.43	5.58E+02	44.96	4.68E+02
36	1290-	1297	1293.50	646.42	3.41E+02	28.54	2.35E+02
M 37	1315-	1334	1319.55	659.44	2.01E+02	19.33	2.71E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
m	38	1315-	1334	1326.62	662.98	2.81E+03	82.16	2.37E+02
	39	1370-	1383	1379.06	689.19	2.51E+02	28.44	2.03E+02
	40	1440-	1454	1445.66	722.50	1.35E+03	47.45	3.16E+02
	41	1509-	1522	1513.87	756.60	1.77E+02	21.98	1.11E+02
	42	1531-	1548	1540.20	769.77	3.80E+02	29.74	1.55E+02
	43	2339-	2353	2348.63	1173.98	1.24E+02	16.20	4.86E+01
	44	2659-	2672	2667.01	1333.17	1.27E+02	14.75	3.33E+01
	45	4446-	4455	4450.60	2224.97	4.13E+01	7.94	9.73E+00
	46	4464-	4482	4471.87	2235.60	1.73E+05	417.26	3.21E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: S100-2381
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.989	2236.00*	100.00	7.329E+02	1.999E+02
Np-237	0.746	300.10	6.63		
		311.90*	38.60	8.103E+00	4.717E-01
Pu-239	0.976	413.70*	0.00	4.301E+06	8.541E+04
Pu-239A	0.969	129.29*	0.01	1.236E+06	3.479E+04
Am-241	0.978	662.42*	0.00	1.167E+06	3.648E+04
Am-241D	0.983	722.01*	0.00	1.229E+06	4.531E+04
Pu-241	0.968	148.57*	0.00	5.153E+06	2.067E+05

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-22-07 9:39:54 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	32.07	9.9581E+01	2.02
2	50.03	6.1206E+01	5.56
3	60.17	2.9848E+03	0.34
4	75.73	1.9106E+01	20.46
5	99.36	1.0120E+03	0.76
6	111.68	2.0045E+02	2.54
7	116.27	1.1064E+02	6.13
10	172.05	4.8128E+01	7.23
11	179.81	2.2965E+01	12.08
12	189.98	3.4368E+01	8.49
13	196.30	4.1402E+01	6.88
14	208.65	5.7265E+02	0.78
15	243.88	1.7118E+01	12.18
16	255.98	3.2084E+01	6.32
17	268.16	1.8116E+01	8.73
18	298.10	2.1305E+01	8.72
M 20	321.60	2.3769E+01	5.41
m 21	324.01	3.3657E+01	4.32
M 22	333.32	2.3920E+02	1.06
m 23	336.26	7.9460E+01	1.62
M 24	342.06	2.3673E+01	3.25
m 25	345.60	2.1477E+02	1.14
26	375.64	3.9669E+02	0.89
M 27	380.79	9.6336E+01	1.54
m 28	383.36	9.2208E+01	1.51
29	393.49	1.9907E+02	0.94
31	423.17	2.6844E+01	3.49
32	446.34	2.4960E+00	16.89
33	452.02	6.4348E+01	1.51
34	482.25	1.5312E+00	24.45
35	619.43	5.1824E+00	8.06
36	646.42	3.1635E+00	8.38
M 37	659.44	1.8633E+00	9.64
39	689.19	2.3349E+00	11.32
41	756.60	1.6476E+00	12.39
42	769.77	3.5268E+00	7.84
43	1173.98	1.1554E+00	13.03
44	1333.17	1.1764E+00	11.65
45	2224.97	3.8335E-01	19.25

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.03E+02	+/-	1.18E+02		3.62E-02	+/-	5.33E-03
SE-75	<	5.61E-01	+/-	3.78E-02	<	2.53E-05	+/-	1.70E-06
EU-152x		2.09E-01	+/-	4.73E-02		9.43E-06	+/-	2.13E-06
U-233		2.02E+03	+/-	1.41E+03		9.12E-02	+/-	6.34E-02
U-235		6.16E-02	+/-	4.61E-02		2.78E-06	+/-	2.08E-06
Np-237		9.27E+00	+/-	5.61E-01		4.18E-04	+/-	2.53E-05
Pu-238	<	5.19E+04	+/-	5.92E+03	<	2.34E+00	+/-	2.66E-01
U-238		4.69E+00	+/-	1.23E+00		2.11E-04	+/-	5.53E-05
Pu-239		5.35E+06	+/-	1.85E+05		2.41E+02	+/-	8.33E+00
Pu-239A		3.47E+06	+/-	1.39E+05		1.56E+02	+/-	6.25E+00
Am-241		1.37E+06	+/-	5.99E+04		6.19E+01	+/-	2.70E+00
Am-241D		1.53E+06	+/-	7.42E+04		6.91E+01	+/-	3.34E+00
Pu-241		9.94E+06	+/-	6.48E+05		4.48E+02	+/-	2.92E+01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-233	2.11E-01	+/-	1.46E-01
U-235	2.85E-02	+/-	2.14E-02
Np-237	1.32E-02	+/-	7.97E-04
U-238	1.40E+01	+/-	3.66E+00
Pu-239	8.61E+01	+/-	2.98E+00
Pu-239A	5.59E+01	+/-	2.24E+00
Am-241	4.01E-01	+/-	1.75E-02
Pu-241	9.61E-02	+/-	6.27E-03

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.33E+02	+/-	2.00E+02		3.30E-02	+/-	9.00E-03
SE-75	<	1.21E+00	+/-	1.34E-02	<	5.44E-05	+/-	6.05E-07
EU-152x	<	6.73E-01	+/-	1.41E-02	<	3.03E-05	+/-	6.35E-07
U-233	<	7.03E+04	+/-	1.78E+03	<	3.17E+00	+/-	8.00E-02
U-235	<	1.67E+00	+/-	4.33E-02	<	7.51E-05	+/-	1.95E-06
Np-237		8.10E+00	+/-	4.72E-01		3.65E-04	+/-	2.12E-05
Pu-238	<	1.23E+05	+/-	2.89E+03	<	5.54E+00	+/-	1.30E-01
U-238	<	1.56E+01	+/-	2.56E-01	<	7.01E-04	+/-	1.15E-05
Pu-239		4.30E+06	+/-	8.54E+04		1.94E+02	+/-	3.85E+00
Pu-239A		1.24E+06	+/-	3.48E+04		5.57E+01	+/-	1.57E+00
Am-241		1.17E+06	+/-	3.65E+04		5.26E+01	+/-	1.64E+00
Am-241D		1.23E+06	+/-	4.53E+04		5.54E+01	+/-	2.04E+00
Pu-241		5.15E+06	+/-	2.07E+05		2.32E+02	+/-	9.31E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	1.15E-02	+/-	6.70E-04
Pu-239	6.92E+01	+/-	1.38E+00
Pu-239A	1.99E+01	+/-	5.60E-01
Am-241	3.41E-01	+/-	1.07E-02
Pu-241	4.98E-02	+/-	2.00E-03

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.933	+/-	6.5292
Matrix Longitudinal Ratio:	0.994	+/-	42.8105
Source Vertical Ratio:	0.907	+/-	0.4548
Matrix Vertical Ratio:	0.849	+/-	0.0528

NUDS could not find the transmission peak in one radial segment.

Radioassay Data Sheet
Procedure ID & Rev: WCP-55 03/07/2002

Wed Aug 22 11:01:06 2007
Software Version: GWAS v2.3bGEN

Drum ID	: LL85101655	Gross Weight (kg)	: 57.6
Sequence Number	: 2382	Fill Height (%)	: 100.0
Assay Date	: 08/22/07 09:58:35	Density (g/cc)	: 0.16
		Net Weight (kg)	: 33.75
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma		
TRU Alpha Activity Concentration:	1.14e-05	+/-	1.70e-06 Ci/g
Total Pu-239 Equiv Activity:	3.93e-01	+/-	5.75e-02 Ci
Total Pu-239 Fissile Gram Equiv:	4.96e+00	+/-	9.11e-01 g
Decay Heat:	1.22e-02	+/-	1.81e-03 W
Total Pu Mass:	5.19e+00	+/-	9.12e-01 g
TMU:	18.42%		
Waste Classification:	TRU		

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	9.98e-03	1.01e+01
Pu-239	9.52e+01	9.81e-02
Pu-240	4.69e+00	1.98e+00
Pu-241	8.12e-02	2.20e+00
Pu-242	1.46e-02	1.10e+01
Am-241	8.14e-02	2.50e+00
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	5.19e-04	1.09e-04	8.88e-03	1.87e-03	5.20e-04
Pu-239	4.95e+00	9.11e-01	3.07e-01	5.65e-02	5.40e-02
Pu-240	2.43e-01	4.51e-02	5.52e-02	1.02e-02	0.00e+00
Pu-241	4.22e-03	7.83e-04	4.36e-01	8.09e-02	4.88e-04
Pu-242	7.58e-04	1.63e-04	2.98e-06	6.38e-07	0.00e+00
Am-241	4.23e-03	7.86e-04	1.45e-02	2.69e-03	3.54e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	4.68e-04	1.36e-04	3.30e-07	9.59e-08	1.93e-04
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	5.46e-02
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.95e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	7.74e-01
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Robert J Haslett Jr — 8-30-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85101655
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2382
Assayed on: 08/22/07 09:58:35
Report Generated: 08/22/07 11:00:51
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

ok

REVIEW Pu-240 Wt Pct +2 Sigma error <4.87> less than <5.87> Review MGA Resu
Pu-240 Wt Pct error <1.98> is within limits
Pu-238 Wt Pct error <10.11> is within limits
QFIT <1.06> is within limits

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.162> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.19e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.55> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <0.58> is acceptable in Segment 2
Pulser value <0.98> is within range in Segment 2
DEAD TIME percentage <0.62> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <0.63> is acceptable in Segment 4
Pulser value <0.99> is within range in Segment 4
DEAD TIME percentage <0.64> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <0.65> is acceptable in Segment 6
Pulser value <0.98> is within range in Segment 6
DEAD TIME percentage <0.66> is acceptable in Segment 7
Pulser value <0.98> is within range in Segment 7
DEAD TIME percentage <0.63> is acceptable in Segment 8
Pulser value <0.99> is within range in Segment 8
DEAD TIME percentage <0.63> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <0.77> is acceptable in Segment 10
Pulser value <1.00> is within range in Segment 10
DEAD TIME percentage <1.02> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.35> is acceptable in Segment 12
Pulser value <1.00> is within range in Segment 12
DEAD TIME percentage <1.59> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <1.41> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.92> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15
DEAD TIME percentage <0.66> is acceptable in Segment 16
Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
Transmission results are acceptable in Segment 5
Transmission results are acceptable in Segment 6
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

All energy peaks within <3.00e+00> RCHISQ limit

Section 7 - FGE MASS REVIEW

FGE Mass <5.87> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <1169.22> is above lower limit <200.00> OK
Np-237 ratio <10578.64> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <4.95> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed OK. Checked

Independent Reviewer: Robert J. Hazlett Date: 8-30-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85101655
Item Description Code:
Sequence Number: 2382
Assayed on: 08/22/07 09:58:35
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA Pu-240 Wt Pct +2 Sigma error is less than lower limit.	OK
SECTION 9 - IDC COUNT TYPE IDC is not available.	N/A

Technical Reviewer: Robert J Haslitt Jr Date: 8-30-07

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***********************************************************************
*****                      M G A   R E P O R T                    *****
***********************************************************************
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Report generated on: 8-22-07 10:55:07 AM

MGA version: MGA V9.5 CI

Spectrum ID: 11202382.CNF Sens : 30.0% LT: 55.4 Mins DT: 0.72
Measurement date: 8-22-07 Declared date: 8-22-07

Sample ID: LL85101655 Detector: Total counts: 7.794E+05

Pu g/cm2 = 0.0915 Cd g/cm2 = 1.6215 FWHM at 122 keV = 611 eV
QFIT = 1.06 FWHM at 208 keV = 726 eV
NQFIT = 1.01

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000105	10.1	10.1	0.1229	10.1	0.00998	10.11	0.00998	10.11
Pu-239	1.000000	0.0	0.9	1172.328	2.2	95.20789	0.10	95.20789	0.10
Pu-240	0.049222	2.1	2.0	57.7044	2.8	4.68632	1.98	4.68632	1.98
Pu-241	0.000853	2.2	2.1	1.0000	0.0	0.08121	2.20	0.08121	2.20
Pu-242	(New alg.	)		0.1796	(11)	0.01459	(11)	0.01459	(11)
Am-241	0.000855	2.5	2.4	1.0027	3.1	0.08143	2.50	0.08143	2.50

Pu-240 effective (meas. date) = 4.736 +/- 2.15%
Am-241 separated about 14.475 +/- 0.686 years ago
Am/Pu-241 weight ratio = 1.00266 +/- 3.17%

Messages :

Lead x-rays detected.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102382.S11
Sample ID: LL85101655 Count Sequence Number: 2382
Assay Start: 8-22-07 9:58:37 AM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 57600.0 g Net: 33750.0 g
Density: 0.162 g /ml

Container Type: 55 Gal Galv 23.8
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv 23.8
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 3:07:06 PM 78569

Reviewed by: Robert J Haslett Jr Date: 8-30-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.37 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.263 +/- 0.0113
SE-75	264.65	0.000 +/- 0.0000	0.375 +/- 0.0111
SE-75	279.53	0.000 +/- 0.0000	0.364 +/- 0.0152
SE-75	400.65	0.000 +/- 0.0000	0.461 +/- 0.0279

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.11	2.31E-01 +/- 6.27E-02	2.30E+00	4.87E-10 +/- 3.44E-09
2	60.24	3.76E+00 +/- 2.38E-01	1.78E+00	6.41E-06 +/- 1.18E-05
3	99.11	2.93E-01 +/- 1.25E-01	1.65E+00	1.50E-04 +/- 4.20E-05
4	129.29	5.38E-01 +/- 1.69E-01	1.60E+00	3.01E-04 +/- 2.13E-05
5	208.91	1.69E-01 +/- 9.03E-02	1.48E+00	3.79E-04 +/- 4.52E-05
6	264.66	1.21E-01 +/- 7.94E-02	1.42E+00	3.24E-04 +/- 2.30E-05
7	300.10	1.73E-01 +/- 7.42E-02	1.41E+00	2.87E-04 +/- 1.52E-05
8	375.79	1.42E-01 +/- 6.09E-02	1.34E+00	2.25E-04 +/- 1.40E-05
9	413.70	1.27E-01 +/- 5.06E-02	1.32E+00	2.03E-04 +/- 1.44E-05
10	443.98	6.07E-02 +/- 4.75E-02	1.31E+00	1.88E-04 +/- 1.44E-05
11	778.90	5.95E-02 +/- 2.66E-02	1.23E+00	1.11E-04 +/- 6.56E-06
12	2236.00	1.00E+02 +/- 1.49E+00	1.13E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 114.33 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.123 +/- 0.0076
SE-75	264.65	0.000 +/- 0.0000	0.177 +/- 0.0071
SE-75	279.53	0.000 +/- 0.0000	0.187 +/- 0.0106
SE-75	400.65	0.000 +/- 0.0000	0.233 +/- 0.0190

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.23	7.10E+00 +/- 3.27E-01	2.33E+00	1.33E-04 +/- 2.14E-04
2	99.33	5.84E-01 +/- 1.99E-01	2.09E+00	3.09E-04 +/- 7.53E-05
3	129.29	9.88E-01 +/- 2.09E-01	2.01E+00	3.88E-04 +/- 2.47E-05
4	148.57	3.01E-01 +/- 1.45E-01	1.97E+00	4.14E-04 +/- 4.21E-05
5	208.67	2.97E-01 +/- 1.14E-01	1.87E+00	4.25E-04 +/- 4.49E-05
6	300.10	1.26E-01 +/- 8.14E-02	1.75E+00	3.67E-04 +/- 1.80E-05
7	333.20	1.13E-01 +/- 6.43E-02	1.71E+00	3.43E-04 +/- 1.64E-05
8	375.55	2.74E-01 +/- 5.84E-02	1.68E+00	3.13E-04 +/- 1.75E-05
9	393.66	1.21E-01 +/- 5.76E-02	1.66E+00	3.01E-04 +/- 1.81E-05
10	413.70	3.12E-01 +/- 6.79E-02	1.64E+00	2.89E-04 +/- 1.85E-05
11	511.29	1.87E-01 +/- 5.19E-02	1.57E+00	2.39E-04 +/- 1.72E-05
12	1001.03	2.58E-02 +/- 1.49E-02	1.38E+00	1.28E-04 +/- 5.83E-06
13	2236.00	1.00E+02 +/- 1.49E+00	1.25E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 114.29 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.099 +/- 0.0075
SE-75	264.65	0.000 +/- 0.0000	0.176 +/- 0.0069
SE-75	279.53	0.000 +/- 0.0000	0.172 +/- 0.0102
SE-75	400.65	0.000 +/- 0.0000	0.206 +/- 0.0181

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.20	8.86E+00 +/- 3.78E-01	2.50E+00	8.09E-05 +/- 2.79E-05
2	99.29	6.75E-01 +/- 2.18E-01	2.23E+00	2.96E-04 +/- 3.04E-05
3	112.01	4.60E-01 +/- 2.32E-01	2.19E+00	3.56E-04 +/- 2.59E-05
4	129.29	1.42E+00 +/- 1.70E-01	2.14E+00	4.18E-04 +/- 2.23E-05
5	148.57	2.29E-01 +/- 1.60E-01	2.08E+00	4.63E-04 +/- 2.25E-05
6	208.53	2.94E-01 +/- 1.24E-01	1.92E+00	4.92E-04 +/- 2.59E-05
7	300.10	8.41E-02 +/- 6.18E-02	1.80E+00	4.16E-04 +/- 1.88E-05
8	375.59	4.68E-01 +/- 1.08E-01	1.74E+00	3.46E-04 +/- 1.41E-05
9	393.68	8.72E-02 +/- 5.48E-02	1.72E+00	3.31E-04 +/- 1.34E-05
10	413.70	3.23E-01 +/- 6.97E-02	1.71E+00	3.16E-04 +/- 1.28E-05
11	1408.01	2.59E-02 +/- 1.49E-02	1.34E+00	1.15E-04 +/- 7.14E-06
12	2236.00	1.00E+02 +/- 1.49E+00	1.28E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 114.27 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.214 +/- 0.0101
SE-75	264.65	0.000 +/- 0.0000	0.313 +/- 0.0098
SE-75	279.53	0.000 +/- 0.0000	0.302 +/- 0.0139
SE-75	400.65	0.000 +/- 0.0000	0.383 +/- 0.0264

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.22	1.06E+01 +/- 4.15E-01	1.92E+00	3.64E-05 +/- 5.78E-05
2	99.45	1.10E+00 +/- 2.24E-01	1.76E+00	2.64E-04 +/- 6.32E-05
3	111.92	4.13E-01 +/- 1.90E-01	1.74E+00	3.36E-04 +/- 3.58E-05
4	129.29	1.45E+00 +/- 1.82E-01	1.71E+00	4.12E-04 +/- 2.61E-05
5	208.77	4.95E-01 +/- 1.32E-01	1.58E+00	4.80E-04 +/- 5.04E-05
6	279.54	1.45E-01 +/- 8.72E-02	1.52E+00	4.11E-04 +/- 2.31E-05
7	375.64	2.42E-01 +/- 8.72E-02	1.43E+00	3.21E-04 +/- 1.71E-05
8	413.70	3.52E-01 +/- 6.84E-02	1.40E+00	2.94E-04 +/- 1.78E-05
9	452.38	1.04E-01 +/- 3.88E-02	1.38E+00	2.70E-04 +/- 1.78E-05

10	722.01	3.84E-02	+/-	2.07E-02	1.30E+00	1.77E-04	+/- 9.59E-06
11	1001.03	8.63E-03	+/-	8.63E-03	1.24E+00	1.37E-04	+/- 6.33E-06
12	2236.00	1.00E+02	+/-	1.49E+00	1.16E+00	7.00E-05	+/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 114.26 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.280 +/- 0.0106
SE-75	264.65	0.000 +/- 0.0000	0.366 +/- 0.0110
SE-75	279.53	0.000 +/- 0.0000	0.349 +/- 0.0151
SE-75	400.65	0.000 +/- 0.0000	0.356 +/- 0.0245

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)		Correction Factor	Original Efficiency	
	1	60.21	1.31E+01	+/- 4.53E-01	1.74E+00	4.81E-05	+/- 8.24E-05
	2	95.36	3.66E-01	+/- 2.20E-01	1.62E+00	2.54E-04	+/- 8.18E-05
	3	104.12	5.42E-01	+/- 1.93E-01	1.60E+00	3.04E-04	+/- 5.78E-05
M	4	126.06	2.49E-01	+/- 7.74E-02	1.57E+00	3.97E-04	+/- 2.37E-05
m	5	130.07	1.78E+00	+/- 2.16E-01	1.57E+00	4.09E-04	+/- 2.73E-05
	6	279.54	1.11E-01	+/- 5.67E-02	1.45E+00	3.92E-04	+/- 2.28E-05
	7	333.44	2.65E-01	+/- 8.07E-02	1.45E+00	3.43E-04	+/- 1.67E-05
	8	345.94	9.74E-02	+/- 6.16E-02	1.45E+00	3.33E-04	+/- 1.69E-05
	9	375.68	1.59E-01	+/- 1.04E-01	1.44E+00	3.11E-04	+/- 1.79E-05
	10	393.36	1.83E-01	+/- 5.50E-02	1.44E+00	2.99E-04	+/- 1.85E-05
	11	413.70	2.24E-01	+/- 6.70E-02	1.44E+00	2.86E-04	+/- 1.90E-05
	12	1112.12	8.63E-03	+/- 8.63E-03	1.25E+00	1.23E-04	+/- 5.54E-06
	13	2236.00	1.00E+02	+/- 1.50E+00	1.18E+00	5.76E-05	+/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 114.25 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.210 +/- 0.0103
SE-75	264.65	0.000 +/- 0.0000	0.308 +/- 0.0098
SE-75	279.53	0.000 +/- 0.0000	0.340 +/- 0.0146
SE-75	400.65	0.000 +/- 0.0000	0.388 +/- 0.0249

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
M	1	31.85	1.71E-01 +/- 6.35E-02	2.58E+00	4.40E-07 +/- 2.79E-06
m	2	34.12	1.39E-01 +/- 6.21E-02	2.46E+00	9.21E-07 +/- 5.17E-06
	3	60.22	1.50E+01 +/- 4.90E-01	1.93E+00	6.11E-05 +/- 9.96E-05
	4	99.24	6.53E-01 +/- 2.72E-01	1.77E+00	3.05E-04 +/- 7.53E-05
	5	104.07	6.88E-01 +/- 2.12E-01	1.76E+00	3.32E-04 +/- 6.08E-05
	6	129.29	1.89E+00 +/- 2.03E-01	1.72E+00	4.31E-04 +/- 2.73E-05
	7	148.57	3.29E-01 +/- 1.34E-01	1.68E+00	4.69E-04 +/- 4.84E-05
	8	204.15	1.67E-01 +/- 8.75E-02	1.59E+00	4.75E-04 +/- 5.27E-05
	9	208.87	4.74E-01 +/- 1.38E-01	1.59E+00	4.72E-04 +/- 5.08E-05
	10	244.70	1.66E-01 +/- 8.99E-02	1.54E+00	4.43E-04 +/- 3.54E-05
	11	311.90	1.40E-01 +/- 8.60E-02	1.45E+00	3.82E-04 +/- 1.81E-05
	12	345.83	1.25E-01 +/- 7.09E-02	1.43E+00	3.55E-04 +/- 1.74E-05
	13	375.66	4.18E-01 +/- 7.69E-02	1.41E+00	3.34E-04 +/- 1.84E-05
	14	383.80	7.81E-02 +/- 4.28E-02	1.41E+00	3.28E-04 +/- 1.87E-05
	15	413.70	3.49E-01 +/- 6.86E-02	1.40E+00	3.09E-04 +/- 1.95E-05
	16	423.17	4.83E-02 +/- 3.37E-02	1.39E+00	3.04E-04 +/- 1.96E-05
	17	452.20	6.83E-02 +/- 3.79E-02	1.38E+00	2.88E-04 +/- 1.97E-05
	18	662.42	4.31E-02 +/- 1.93E-02	1.31E+00	2.10E-04 +/- 1.26E-05
	19	1085.91	8.62E-03 +/- 8.62E-03	1.23E+00	1.34E-04 +/- 5.68E-06
	20	2236.00	1.00E+02 +/- 1.49E+00	1.16E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 114.24 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.337 +/- 0.0125
SE-75	264.65	0.000 +/- 0.0000	0.428 +/- 0.0122
SE-75	279.53	0.000 +/- 0.0000	0.426 +/- 0.0169
SE-75	400.65	0.000 +/- 0.0000	0.443 +/- 0.0269

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.20	1.70E+01 +/- 5.11E-01	1.61E+00	1.61E-05 +/- 2.40E-05
2	99.32	1.03E+00 +/- 2.70E-01	1.51E+00	2.43E-04 +/- 5.53E-05
3	111.78	4.26E-01 +/- 2.09E-01	1.49E+00	3.35E-04 +/- 3.47E-05
4	129.29	1.92E+00 +/- 2.24E-01	1.48E+00	4.41E-04 +/- 2.71E-05
5	135.30	2.53E-01 +/- 1.33E-01	1.47E+00	4.69E-04 +/- 3.37E-05
6	208.66	2.34E-01 +/- 1.57E-01	1.40E+00	5.47E-04 +/- 5.32E-05
7	345.50	2.44E-01 +/- 7.75E-02	1.35E+00	3.78E-04 +/- 1.76E-05
8	375.67	4.91E-01 +/- 9.26E-02	1.34E+00	3.49E-04 +/- 1.82E-05
9	393.31	1.28E-01 +/- 4.98E-02	1.34E+00	3.33E-04 +/- 1.86E-05
10	413.70	4.73E-01 +/- 7.18E-02	1.34E+00	3.17E-04 +/- 1.88E-05
11	662.42	2.59E-02 +/- 1.49E-02	1.26E+00	2.03E-04 +/- 1.17E-05
12	722.01	5.60E-02 +/- 2.81E-02	1.25E+00	1.89E-04 +/- 9.99E-06
13	867.39	3.45E-02 +/- 2.82E-02	1.22E+00	1.62E-04 +/- 7.44E-06
14	1112.12	4.36E-02 +/- 3.71E-02	1.19E+00	1.32E-04 +/- 5.60E-06
15	1408.01	2.53E-02 +/- 2.12E-02	1.17E+00	1.05E-04 +/- 7.16E-06
16	2236.00	1.00E+02 +/- 1.49E+00	1.14E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 114.27 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.386 +/- 0.0138
SE-75	264.65	0.000 +/- 0.0000	0.486 +/- 0.0133
SE-75	279.53	0.000 +/- 0.0000	0.477 +/- 0.0185
SE-75	400.65	0.000 +/- 0.0000	0.498 +/- 0.0288

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.23	8.46E+00 +/- 3.89E-01	1.53E+00	1.10E-04 +/- 3.85E-05
2	99.39	7.33E-01 +/- 2.40E-01	1.44E+00	3.25E-04 +/- 3.31E-05
3	129.29	1.38E+00 +/- 1.78E-01	1.41E+00	4.27E-04 +/- 2.26E-05
4	208.66	2.90E-01 +/- 1.29E-01	1.34E+00	4.74E-04 +/- 2.60E-05
5	249.10	1.00E-01 +/- 5.90E-02	1.31E+00	4.45E-04 +/- 2.35E-05

6	311.90	1.45E-01	+/-	7.06E-02	1.30E+00	3.88E-04	+/- 1.78E-05
7	333.39	2.46E-01	+/-	8.48E-02	1.30E+00	3.69E-04	+/- 1.62E-05
8	360.87	7.77E-02	+/-	3.96E-02	1.29E+00	3.46E-04	+/- 1.46E-05
9	375.91	2.47E-01	+/-	7.43E-02	1.29E+00	3.34E-04	+/- 1.38E-05
10	413.70	1.79E-01	+/-	6.41E-02	1.28E+00	3.06E-04	+/- 1.25E-05
11	1112.12	8.64E-03	+/-	8.64E-03	1.16E+00	1.26E-04	+/- 4.65E-06
12	2236.00	1.00E+02	+/-	1.49E+00	1.12E+00	1.19E-04	+/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 114.27 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.354 +/- 0.0130
SE-75	264.65	0.000 +/- 0.0000	0.444 +/- 0.0125
SE-75	279.53	0.000 +/- 0.0000	0.432 +/- 0.0172
SE-75	400.65	0.000 +/- 0.0000	0.526 +/- 0.0295

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.25	4.43E+00 +/- 3.25E-01	1.58E+00	1.67E-05 +/- 2.60E-05
2	99.26	9.06E-01 +/- 2.74E-01	1.49E+00	2.35E-04 +/- 5.59E-05
3	111.84	5.57E-01 +/- 2.75E-01	1.47E+00	3.23E-04 +/- 3.44E-05
4	129.29	1.71E+00 +/- 2.05E-01	1.45E+00	4.21E-04 +/- 2.66E-05
5	152.68	3.42E-01 +/- 1.69E-01	1.43E+00	4.97E-04 +/- 5.14E-05
6	208.72	1.62E-01 +/- 1.04E-01	1.38E+00	5.11E-04 +/- 5.15E-05
7	333.26	2.04E-01 +/- 9.62E-02	1.31E+00	3.59E-04 +/- 1.71E-05
8	375.56	3.93E-01 +/- 8.70E-02	1.28E+00	3.18E-04 +/- 1.78E-05
9	413.70	3.13E-01 +/- 7.48E-02	1.26E+00	2.88E-04 +/- 1.83E-05
10	2236.00	1.00E+02 +/- 1.49E+00	1.11E+00	6.12E-05 +/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 114.11 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.470 +/- 0.0156
SE-75	264.65	0.000 +/- 0.0000	0.591 +/- 0.0155
SE-75	279.53	0.000 +/- 0.0000	0.592 +/- 0.0209
SE-75	400.65	0.000 +/- 0.0000	0.679 +/- 0.0344

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.89	1.44E-01 +/- 8.84E-02	1.67E+00	1.63E-05 +/- 1.63E-05
2	60.21	1.11E+01 +/- 4.16E-01	1.41E+00	1.38E-04 +/- 4.88E-05
3	95.30	9.14E-01 +/- 3.79E-01	1.35E+00	3.14E-04 +/- 3.66E-05
4	99.22	1.73E+00 +/- 4.59E-01	1.34E+00	3.29E-04 +/- 3.41E-05
5	104.31	4.83E-01 +/- 3.29E-01	1.34E+00	3.48E-04 +/- 3.11E-05
6	111.82	1.51E+00 +/- 3.07E-01	1.33E+00	3.72E-04 +/- 2.73E-05
7	129.29	7.48E+00 +/- 3.43E-01	1.32E+00	4.15E-04 +/- 2.22E-05
8	204.11	3.75E-01 +/- 1.70E-01	1.25E+00	4.57E-04 +/- 2.52E-05
9	236.90	2.17E-01 +/- 1.07E-01	1.23E+00	4.42E-04 +/- 2.37E-05
10	333.33	3.18E-01 +/- 1.36E-01	1.18E+00	3.71E-04 +/- 1.62E-05
M 11	342.20	1.68E-01 +/- 5.31E-02	1.18E+00	3.64E-04 +/- 1.56E-05
m 12	345.79	6.66E-01 +/- 1.25E-01	1.18E+00	3.61E-04 +/- 1.54E-05
13	368.56	2.19E-01 +/- 8.79E-02	1.17E+00	3.45E-04 +/- 1.43E-05
14	375.72	1.61E+00 +/- 1.45E-01	1.16E+00	3.40E-04 +/- 1.40E-05
15	393.58	5.95E-01 +/- 1.06E-01	1.16E+00	3.28E-04 +/- 1.34E-05
16	413.70	1.28E+00 +/- 1.19E-01	1.15E+00	3.15E-04 +/- 1.29E-05
17	423.28	9.72E-02 +/- 4.36E-02	1.15E+00	3.09E-04 +/- 1.27E-05
18	443.98	1.05E-01 +/- 4.54E-02	1.15E+00	2.97E-04 +/- 1.23E-05
19	451.96	1.50E-01 +/- 4.80E-02	1.15E+00	2.93E-04 +/- 1.22E-05
20	722.01	6.01E-02 +/- 2.69E-02	1.11E+00	1.89E-04 +/- 9.55E-06
21	1085.91	2.62E-02 +/- 1.51E-02	1.09E+00	1.31E-04 +/- 4.92E-06
22	1408.01	3.50E-02 +/- 1.75E-02	1.08E+00	1.09E-04 +/- 6.83E-06
23	2236.00	1.00E+02 +/- 1.50E+00	1.06E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 113.83 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.206 +/- 0.0101
SE-75	264.65	0.000 +/- 0.0000	0.315 +/- 0.0103
SE-75	279.53	0.000 +/- 0.0000	0.328 +/- 0.0156
SE-75	400.65	0.000 +/- 0.0000	0.364 +/- 0.0247

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.28	9.26E-01 +/- 1.70E-01	2.58E+00	1.31E-03 +/- 8.33E-03
2	50.54	6.41E-01 +/- 3.34E-01	2.05E+00	5.93E-04 +/- 1.54E-03
3	60.21	2.28E+01 +/- 6.45E-01	1.95E+00	5.03E-04 +/- 8.45E-04
4	99.20	5.78E+00 +/- 6.40E-01	1.78E+00	4.09E-04 +/- 1.04E-04
5	111.74	2.02E+00 +/- 4.74E-01	1.76E+00	4.03E-04 +/- 4.45E-05
6	129.29	1.72E+01 +/- 5.35E-01	1.73E+00	3.99E-04 +/- 2.58E-05
7	144.77	5.32E-01 +/- 2.97E-01	1.70E+00	3.98E-04 +/- 3.97E-05
8	148.57	3.90E-01 +/- 2.41E-01	1.69E+00	3.97E-04 +/- 4.23E-05
9	161.73	1.10E+00 +/- 2.81E-01	1.66E+00	3.96E-04 +/- 4.80E-05
10	204.25	1.48E+00 +/- 2.43E-01	1.59E+00	3.89E-04 +/- 4.47E-05
11	300.10	2.91E-01 +/- 1.48E-01	1.47E+00	3.57E-04 +/- 1.80E-05
M 12	333.47	1.50E+00 +/- 1.91E-01	1.46E+00	3.43E-04 +/- 1.63E-05
m 13	336.62	3.38E-01 +/- 7.81E-02	1.46E+00	3.42E-04 +/- 1.63E-05
14	345.67	1.24E+00 +/- 1.61E-01	1.45E+00	3.38E-04 +/- 1.66E-05
15	375.70	2.44E+00 +/- 2.66E-01	1.44E+00	3.25E-04 +/- 1.79E-05
M 16	380.95	7.48E-01 +/- 1.23E-01	1.44E+00	3.23E-04 +/- 1.81E-05
m 17	383.36	5.24E-01 +/- 9.52E-02	1.44E+00	3.21E-04 +/- 1.82E-05
18	393.56	1.41E+00 +/- 1.34E-01	1.44E+00	3.17E-04 +/- 1.87E-05
19	413.70	3.39E+00 +/- 1.89E-01	1.43E+00	3.08E-04 +/- 1.94E-05
20	423.27	2.22E-01 +/- 5.58E-02	1.42E+00	3.04E-04 +/- 1.97E-05
21	452.03	4.56E-01 +/- 7.97E-02	1.41E+00	2.92E-04 +/- 2.00E-05
22	722.01	3.55E-02 +/- 2.15E-02	1.31E+00	1.97E-04 +/- 1.08E-05
23	2236.00	1.00E+02 +/- 1.50E+00	1.17E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.45 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.110 +/- 0.0104
SE-75	264.65	0.000 +/- 0.0000	0.223 +/- 0.0087
SE-75	279.53	0.000 +/- 0.0000	0.244 +/- 0.0138
SE-75	400.65	0.000 +/- 0.0000	0.291 +/- 0.0241

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.06	8.68E-01 +/- 2.11E-01	3.41E+00	2.40E-09 +/- 1.47E-08
2	60.21	4.41E+01 +/- 9.54E-01	2.42E+00	1.31E-05 +/- 2.09E-05
3	78.85	1.13E+00 +/- 3.47E-01	2.26E+00	8.54E-05 +/- 5.89E-05
4	99.23	1.36E+01 +/- 8.14E-01	2.16E+00	2.32E-04 +/- 5.62E-05
5	104.61	1.45E+00 +/- 5.86E-01	2.14E+00	2.73E-04 +/- 4.77E-05
6	111.72	5.10E+00 +/- 5.89E-01	2.12E+00	3.26E-04 +/- 3.51E-05
7	129.29	2.93E+01 +/- 7.28E-01	2.08E+00	4.34E-04 +/- 2.74E-05
8	144.95	1.35E+00 +/- 3.58E-01	2.02E+00	4.98E-04 +/- 4.73E-05
9	161.37	1.28E+00 +/- 3.08E-01	1.96E+00	5.35E-04 +/- 6.09E-05
10	172.10	6.65E-01 +/- 2.50E-01	1.92E+00	5.45E-04 +/- 6.42E-05
11	179.91	7.64E-01 +/- 3.29E-01	1.90E+00	5.47E-04 +/- 6.44E-05
12	196.30	4.62E-01 +/- 2.80E-01	1.85E+00	5.42E-04 +/- 6.05E-05
13	204.31	2.16E+00 +/- 3.19E-01	1.82E+00	5.35E-04 +/- 5.73E-05
14	208.69	5.81E-01 +/- 4.15E-01	1.81E+00	5.31E-04 +/- 5.52E-05
15	244.70	3.52E-01 +/- 1.93E-01	1.72E+00	4.83E-04 +/- 3.71E-05
16	256.20	3.51E-01 +/- 1.75E-01	1.69E+00	4.66E-04 +/- 3.20E-05
17	268.34	2.76E-01 +/- 1.99E-01	1.66E+00	4.48E-04 +/- 2.73E-05
M 18	298.47	3.06E-01 +/- 1.19E-01	1.61E+00	4.06E-04 +/- 1.97E-05
m 19	302.43	1.83E-01 +/- 8.49E-02	1.61E+00	4.00E-04 +/- 1.91E-05
20	311.90	2.79E-01 +/- 1.44E-01	1.60E+00	3.88E-04 +/- 1.81E-05
M 21	333.47	2.64E+00 +/- 2.57E-01	1.59E+00	3.62E-04 +/- 1.72E-05
m 22	336.70	6.88E-01 +/- 1.09E-01	1.59E+00	3.59E-04 +/- 1.72E-05
M 23	342.24	2.23E-01 +/- 7.26E-02	1.58E+00	3.52E-04 +/- 1.72E-05
m 24	345.77	2.43E+00 +/- 2.57E-01	1.58E+00	3.49E-04 +/- 1.72E-05
25	375.71	4.17E+00 +/- 3.51E-01	1.56E+00	3.19E-04 +/- 1.78E-05
M 26	380.89	1.24E+00 +/- 1.52E-01	1.55E+00	3.14E-04 +/- 1.80E-05
m 27	383.41	1.08E+00 +/- 1.34E-01	1.55E+00	3.12E-04 +/- 1.80E-05
28	393.57	2.37E+00 +/- 1.72E-01	1.55E+00	3.03E-04 +/- 1.82E-05
29	413.70	6.40E+00 +/- 2.62E-01	1.53E+00	2.87E-04 +/- 1.84E-05
30	423.22	3.78E-01 +/- 9.74E-02	1.53E+00	2.81E-04 +/- 1.84E-05
31	452.14	8.68E-01 +/- 9.92E-02	1.51E+00	2.62E-04 +/- 1.82E-05
32	1112.12	2.64E-02 +/- 1.52E-02	1.30E+00	1.27E-04 +/- 5.46E-06
33	1174.51	5.34E-02 +/- 2.49E-02	1.29E+00	1.22E-04 +/- 5.20E-06
34	1408.01	8.80E-03 +/- 8.80E-03	1.26E+00	1.08E-04 +/- 7.12E-06
35	2236.00	1.00E+02 +/- 1.51E+00	1.21E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.17 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.220 +/- 0.0106
SE-75	264.65	0.000 +/- 0.0000	0.333 +/- 0.0108
SE-75	279.53	0.000 +/- 0.0000	0.343 +/- 0.0164
SE-75	400.65	0.000 +/- 0.0000	0.379 +/- 0.0287

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.03	1.39E+00 +/- 2.33E-01	2.52E+00	1.72E-08 +/- 1.12E-07
	2	50.13	3.86E+00 +/- 6.58E-01	2.00E+00	5.08E-06 +/- 1.35E-05
	3	60.21	6.62E+01 +/- 1.24E+00	1.90E+00	2.30E-05 +/- 3.89E-05
	4	99.22	1.48E+01 +/- 8.97E-01	1.74E+00	2.49E-04 +/- 6.34E-05
	5	104.52	4.09E+00 +/- 6.55E-01	1.73E+00	2.84E-04 +/- 5.21E-05
	6	111.75	4.35E+00 +/- 6.40E-01	1.72E+00	3.30E-04 +/- 3.65E-05
	7	116.08	1.65E+00 +/- 7.06E-01	1.71E+00	3.54E-04 +/- 2.87E-05
M	8	126.01	1.11E+00 +/- 1.83E-01	1.70E+00	4.03E-04 +/- 2.40E-05
m	9	130.01	3.51E+01 +/- 9.60E-01	1.69E+00	4.19E-04 +/- 2.78E-05
	10	144.72	1.15E+00 +/- 4.16E-01	1.66E+00	4.65E-04 +/- 4.62E-05
	11	161.61	7.77E-01 +/- 2.77E-01	1.63E+00	4.93E-04 +/- 5.93E-05
	12	172.14	7.58E-01 +/- 3.08E-01	1.61E+00	5.00E-04 +/- 6.22E-05
	13	196.51	6.75E-01 +/- 3.27E-01	1.57E+00	4.96E-04 +/- 5.84E-05
	14	204.22	3.28E+00 +/- 2.72E-01	1.56E+00	4.91E-04 +/- 5.54E-05
	15	208.68	5.65E+00 +/- 3.40E-01	1.55E+00	4.88E-04 +/- 5.34E-05
	16	256.03	3.31E-01 +/- 1.72E-01	1.49E+00	4.37E-04 +/- 3.13E-05
	17	300.10	3.52E-01 +/- 2.14E-01	1.45E+00	3.86E-04 +/- 1.92E-05
	18	311.90	4.02E-01 +/- 1.50E-01	1.45E+00	3.74E-04 +/- 1.79E-05
	19	321.23	4.90E-01 +/- 1.72E-01	1.44E+00	3.65E-04 +/- 1.75E-05
M	20	333.43	3.33E+00 +/- 2.90E-01	1.44E+00	3.53E-04 +/- 1.73E-05
m	21	336.69	6.73E-01 +/- 1.07E-01	1.44E+00	3.50E-04 +/- 1.73E-05
	22	345.68	2.04E+00 +/- 3.56E-01	1.43E+00	3.41E-04 +/- 1.75E-05
	23	368.48	9.33E-01 +/- 2.22E-01	1.43E+00	3.22E-04 +/- 1.83E-05
	24	375.68	5.43E+00 +/- 4.04E-01	1.42E+00	3.16E-04 +/- 1.85E-05
M	25	380.81	1.64E+00 +/- 1.74E-01	1.42E+00	3.12E-04 +/- 1.87E-05
m	26	383.52	1.40E+00 +/- 1.53E-01	1.42E+00	3.10E-04 +/- 1.88E-05
	27	393.57	3.04E+00 +/- 1.96E-01	1.42E+00	3.03E-04 +/- 1.90E-05
	28	413.70	7.64E+00 +/- 2.92E-01	1.41E+00	2.89E-04 +/- 1.94E-05
	29	423.29	5.57E-01 +/- 1.01E-01	1.40E+00	2.83E-04 +/- 1.95E-05
	30	451.99	9.40E-01 +/- 1.09E-01	1.39E+00	2.67E-04 +/- 1.94E-05
	31	609.26	3.88E-02 +/- 3.04E-02	1.33E+00	2.06E-04 +/- 1.42E-05
	32	722.01	6.56E-02 +/- 4.24E-02	1.30E+00	1.80E-04 +/- 1.01E-05

33	964.13	2.04E-02	+/-	2.31E-02	1.25E+00	1.45E-04 +/-	6.45E-06
34	2236.00	1.00E+02	+/-	1.50E+00	1.17E+00	5.36E-05 +/-	3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 113.38 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.286 +/- 0.0126
SE-75	264.65	0.000 +/- 0.0000	0.411 +/- 0.0125
SE-75	279.53	0.000 +/- 0.0000	0.421 +/- 0.0182
SE-75	400.65	0.000 +/- 0.0000	0.438 +/- 0.0314

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)		Correction Factor	Original Efficiency	
	1	32.32	1.00E+00	+/- 2.14E-01	2.19E+00	3.71E-06 +/-	2.20E-05
	2	50.16	1.61E+00	+/- 5.11E-01	1.80E+00	4.68E-05 +/-	1.15E-04
	3	60.21	5.63E+01	+/- 1.12E+00	1.72E+00	9.61E-05 +/-	1.50E-04
	4	99.24	9.44E+00	+/- 8.51E-01	1.60E+00	3.18E-04 +/-	7.58E-05
	5	104.52	5.15E+00	+/- 6.24E-01	1.59E+00	3.42E-04 +/-	5.89E-05
	6	111.73	3.14E+00	+/- 5.74E-01	1.58E+00	3.70E-04 +/-	3.92E-05
	7	116.00	1.46E+00	+/- 6.24E-01	1.57E+00	3.84E-04 +/-	3.04E-05
M	8	126.00	8.01E-01	+/- 1.74E-01	1.56E+00	4.12E-04 +/-	2.40E-05
m	9	130.02	2.26E+01	+/- 7.70E-01	1.56E+00	4.22E-04 +/-	2.68E-05
	10	144.88	7.38E-01	+/- 3.01E-01	1.53E+00	4.47E-04 +/-	4.17E-05
	11	148.57	5.71E-01	+/- 2.96E-01	1.53E+00	4.51E-04 +/-	4.47E-05
	12	171.89	5.52E-01	+/- 2.89E-01	1.49E+00	4.64E-04 +/-	5.40E-05
	13	196.25	6.06E-01	+/- 2.65E-01	1.46E+00	4.61E-04 +/-	5.10E-05
	14	204.19	2.57E+00	+/- 2.55E-01	1.45E+00	4.57E-04 +/-	4.85E-05
	15	208.70	2.07E+00	+/- 4.72E-01	1.44E+00	4.54E-04 +/-	4.70E-05
M	16	264.90	1.71E-01	+/- 6.93E-02	1.38E+00	4.11E-04 +/-	2.61E-05
m	17	268.42	2.67E-01	+/- 9.04E-02	1.37E+00	4.08E-04 +/-	2.51E-05
	18	311.90	2.43E-01	+/- 1.54E-01	1.36E+00	3.71E-04 +/-	1.72E-05
M	19	321.70	3.40E-01	+/- 1.10E-01	1.36E+00	3.63E-04 +/-	1.67E-05
m	20	324.34	3.40E-01	+/- 1.10E-01	1.36E+00	3.61E-04 +/-	1.66E-05
M	21	333.49	2.68E+00	+/- 2.60E-01	1.36E+00	3.53E-04 +/-	1.64E-05
m	22	336.65	7.01E-01	+/- 1.15E-01	1.35E+00	3.51E-04 +/-	1.64E-05
M	23	342.34	4.00E-01	+/- 8.26E-02	1.35E+00	3.47E-04 +/-	1.64E-05
m	24	345.67	2.69E+00	+/- 2.59E-01	1.35E+00	3.44E-04 +/-	1.65E-05
	25	368.55	4.89E-01	+/- 1.68E-01	1.35E+00	3.27E-04 +/-	1.70E-05
	26	375.67	7.29E+00	+/- 3.10E-01	1.35E+00	3.22E-04 +/-	1.72E-05
	27	393.60	2.79E+00	+/- 1.92E-01	1.35E+00	3.10E-04 +/-	1.77E-05
	28	413.70	6.81E+00	+/- 2.82E-01	1.34E+00	2.98E-04 +/-	1.80E-05

29	423.16	4.31E-01	+/-	9.15E-02	1.34E+00	2.92E-04	+/-	1.81E-05
30	443.98	1.49E-01	+/-	5.56E-02	1.33E+00	2.80E-04	+/-	1.81E-05
31	452.16	8.48E-01	+/-	1.02E-01	1.33E+00	2.76E-04	+/-	1.81E-05
32	510.94	1.49E-01	+/-	6.09E-02	1.31E+00	2.47E-04	+/-	1.69E-05
33	662.42	7.54E-02	+/-	5.16E-02	1.26E+00	1.96E-04	+/-	1.14E-05
34	964.13	3.50E-02	+/-	1.75E-02	1.21E+00	1.41E-04	+/-	6.33E-06
35	2236.00	1.00E+02	+/-	1.50E+00	1.14E+00	7.64E-05	+/-	4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 113.94 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.291 +/- 0.0115
SE-75	264.65	0.000 +/- 0.0000	0.407 +/- 0.0122
SE-75	279.53	0.000 +/- 0.0000	0.420 +/- 0.0171
SE-75	400.65	0.000 +/- 0.0000	0.443 +/- 0.0276

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
1	31.89	4.07E-01	+/-	1.31E-01	2.19E+00	1.07E-09	+/-	6.81E-09
2	60.22	2.26E+01	+/-	6.46E-01	1.71E+00	1.24E-05	+/-	2.04E-05
3	99.24	3.85E+00	+/-	5.62E-01	1.59E+00	2.32E-04	+/-	5.77E-05
4	104.65	2.01E+00	+/-	4.24E-01	1.58E+00	2.73E-04	+/-	4.84E-05
5	111.73	1.05E+00	+/-	4.04E-01	1.57E+00	3.22E-04	+/-	3.50E-05
6	115.97	7.12E-01	+/-	4.23E-01	1.57E+00	3.50E-04	+/-	2.80E-05
7	129.29	8.57E+00	+/-	3.94E-01	1.55E+00	4.21E-04	+/-	2.67E-05
8	148.57	3.48E-01	+/-	2.28E-01	1.52E+00	4.82E-04	+/-	5.01E-05
9	196.35	3.13E-01	+/-	1.62E-01	1.46E+00	4.94E-04	+/-	5.76E-05
10	208.66	1.69E+00	+/-	2.83E-01	1.44E+00	4.81E-04	+/-	5.23E-05
11	300.10	1.83E-01	+/-	1.15E-01	1.36E+00	3.60E-04	+/-	1.79E-05
12	333.39	9.41E-01	+/-	1.70E-01	1.35E+00	3.24E-04	+/-	1.53E-05
13	345.72	9.91E-01	+/-	1.64E-01	1.35E+00	3.13E-04	+/-	1.53E-05
14	368.37	2.81E-01	+/-	1.36E-01	1.35E+00	2.93E-04	+/-	1.57E-05
15	375.72	2.42E+00	+/-	2.38E-01	1.35E+00	2.88E-04	+/-	1.59E-05
M 16	380.64	4.43E-01	+/-	9.53E-02	1.34E+00	2.84E-04	+/-	1.60E-05
m 17	383.21	4.73E-01	+/-	9.78E-02	1.34E+00	2.82E-04	+/-	1.60E-05
18	393.55	1.06E+00	+/-	1.27E-01	1.34E+00	2.75E-04	+/-	1.62E-05
19	413.70	3.35E+00	+/-	1.90E-01	1.34E+00	2.62E-04	+/-	1.65E-05
20	423.40	1.79E-01	+/-	5.97E-02	1.33E+00	2.56E-04	+/-	1.66E-05
21	452.38	3.42E-01	+/-	8.19E-02	1.32E+00	2.40E-04	+/-	1.65E-05
22	2236.00	1.00E+02	+/-	1.50E+00	1.14E+00	3.18E-05	+/-	1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.24 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.557 +/- 0.0173
SE-75	264.65	0.000 +/- 0.0000	0.639 +/- 0.0162
SE-75	279.53	0.000 +/- 0.0000	0.671 +/- 0.0221
SE-75	400.65	0.000 +/- 0.0000	0.701 +/- 0.0346

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.21	5.64E+00 +/- 3.18E-01	1.31E+00	5.63E-05 +/- 2.42E-05
2	99.37	7.53E-01 +/- 3.27E-01	1.26E+00	1.69E-04 +/- 2.09E-05
3	129.29	1.92E+00 +/- 2.00E-01	1.24E+00	2.27E-04 +/- 1.46E-05
4	185.71	2.57E-01 +/- 1.19E-01	1.21E+00	2.63E-04 +/- 1.76E-05
5	208.74	5.04E-01 +/- 1.60E-01	1.20E+00	2.62E-04 +/- 1.78E-05
6	225.74	1.06E-01 +/- 6.50E-02	1.19E+00	2.58E-04 +/- 1.73E-05
7	244.70	1.77E-01 +/- 1.16E-01	1.19E+00	2.52E-04 +/- 1.64E-05
8	279.54	1.42E-01 +/- 1.09E-01	1.16E+00	2.37E-04 +/- 1.43E-05
9	333.28	1.83E-01 +/- 8.82E-02	1.15E+00	2.12E-04 +/- 1.13E-05
10	345.89	1.64E-01 +/- 1.13E-01	1.15E+00	2.07E-04 +/- 1.08E-05
11	375.72	4.85E-01 +/- 1.04E-01	1.14E+00	1.94E-04 +/- 9.73E-06
12	413.70	5.68E-01 +/- 9.06E-02	1.14E+00	1.79E-04 +/- 8.85E-06
13	867.39	3.11E-02 +/- 2.34E-02	1.09E+00	8.96E-05 +/- 5.22E-06
14	1333.34	1.04E-01 +/- 2.99E-02	1.07E+00	6.64E-05 +/- 4.06E-06
15	2236.00	1.00E+02 +/- 1.50E+00	1.06E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85101655
Peak Locate Performed on: 8-22-07 10:55:08 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.82	0.2112	32.07	9.41
2	100.95	0.2234	50.14	6.69
3	121.09	0.0560	60.21	138.83
4	191.31	0.1062	95.32	40.59
5	199.13	0.0777	99.23	71.52
6	209.67	0.1185	104.50	25.66
7	224.17	0.1059	111.75	36.75
8	232.66	0.1334	116.00	14.19
9	260.79	0.0667	130.06	95.72
10	290.36	0.2002	144.85	12.55
11	299.29	0.1902	149.31	13.05
12	323.89	0.2044	161.61	7.65
13	344.85	0.2441	172.09	7.70
14	380.82	0.2820	190.08	5.67
15	393.46	0.2354	196.40	6.60
16	418.03	0.1018	208.68	40.58
17	512.77	0.2255	256.05	8.54
18	625.75	0.2566	312.54	6.25
19	667.52	0.1169	333.44	26.94
20	674.35	0.2322	336.61	9.66
21	684.78	0.2757	342.19	7.02
22	692.04	0.1200	345.71	28.42
23	738.03	0.1917	368.68	7.10
24	752.03	0.0898	375.68	49.63
25	762.04	0.1574	380.83	18.11
26	767.86	0.1805	383.41	14.22
27	787.80	0.1195	393.57	26.33
28	829.42	0.0883	414.37	44.89
29	847.15	0.1738	423.24	13.16
30	904.86	0.1527	452.10	16.41
31	1023.35	0.2174	511.34	7.30
32	1118.70	0.2449	559.01	5.84
33	2349.10	0.2220	1174.22	6.36
34	2667.57	0.2231	1333.45	6.06
35	4471.93	0.0263	2235.63	411.58

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85101655
Peak Analysis Performed on: 8-22-07 10:55:08 AM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	61-	67	64.82	32.07	4.05E+02	42.08	5.99E+02
2	94-	104	100.95	50.14	1.53E+03	144.93	7.78E+03
3	114-	127	121.09	60.21	3.65E+04	248.65	9.11E+03
4	184-	194	191.31	95.32	8.73E+02	180.69	1.27E+04
5	194-	205	199.13	99.23	5.34E+03	229.57	1.86E+04
6	205-	216	209.67	104.50	1.97E+03	166.52	9.56E+03
7	217-	228	224.17	111.75	2.10E+03	163.07	9.47E+03
8	228-	239	232.66	116.00	6.11E+02	174.21	1.06E+04
9	255-	267	260.79	130.06	1.50E+04	170.31	5.32E+03
10	283-	295	290.36	144.85	3.09E+02	108.77	4.33E+03
11	295-	304	299.29	149.31	2.81E+02	89.83	3.40E+03
12	316-	330	323.89	161.61	4.34E+02	110.99	4.11E+03
13	340-	351	344.85	172.09	4.60E+02	86.20	2.78E+03
14	376-	387	380.82	190.08	1.53E+02	81.70	2.60E+03
15	387-	400	393.46	196.40	4.20E+02	90.60	2.82E+03
16	414-	425	418.03	208.68	2.30E+03	96.70	2.71E+03
17	510-	516	512.77	256.05	1.89E+02	39.31	7.14E+02
18	618-	631	625.75	312.54	7.41E+01	53.19	1.00E+03
M 19	662-	681	667.55	333.44	1.55E+03	69.23	6.47E+02
m 20	662-	681	673.88	336.61	3.05E+02	28.43	7.24E+02
M 21	681-	699	685.05	342.19	1.94E+02	22.50	4.35E+02
m 22	681-	699	692.08	345.71	1.47E+03	65.88	4.51E+02
23	730-	745	738.03	368.68	3.52E+02	53.54	8.37E+02
24	745-	759	752.03	375.68	2.70E+03	94.65	1.99E+03
M 25	759-	773	762.32	380.83	7.23E+02	42.37	3.62E+02
m 26	759-	773	767.50	383.41	6.15E+02	37.13	3.12E+02
27	780-	795	787.80	393.57	1.46E+03	50.48	3.62E+02
28	821-	837	829.42	414.37	3.72E+03	68.76	3.22E+02
29	842-	852	847.15	423.24	1.98E+02	27.41	2.26E+02
30	900-	909	904.86	452.10	4.35E+02	27.80	1.50E+02
31	1015-	1031	1023.35	511.34	3.15E+02	27.77	1.45E+02
32	1115-	1123	1118.70	559.01	6.10E+01	14.40	6.80E+01
33	2343-	2358	2349.10	1174.22	9.44E+01	15.32	4.56E+01
34	2660-	2673	2667.57	1333.45	8.47E+01	13.53	3.53E+01
35	4462-	4482	4471.93	2235.63	1.85E+05	430.39	9.95E+01

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85101655
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.990	2236.00*	100.00	7.616E+02	1.861E+02
Np-237	0.738	300.10	6.63		
		311.90*	38.60	1.818E-01	1.304E-01
Pu-239	0.968	413.70*	0.00	2.895E+05	7.631E+03
Pu-239A	0.959	129.29*	0.01	2.338E+05	6.392E+03
Pu-241	0.961	148.57*	0.00	1.310E+05	4.201E+04

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-22-07 10:55:08 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	32.07	3.5158E+00	10.40
2	50.14	1.3270E+01	9.49
3	60.21	3.1706E+02	0.73
4	95.32	7.5822E+00	20.70
5	99.23	4.6342E+01	4.31
6	104.50	1.7140E+01	8.44
7	111.75	1.8227E+01	7.78
8	116.00	5.3046E+00	28.53
10	144.85	2.6843E+00	35.20
12	161.61	3.7700E+00	25.58
13	172.09	3.9915E+00	18.76
14	190.08	1.3273E+00	53.47
15	196.40	3.6445E+00	21.60
16	208.68	1.9967E+01	4.21
17	256.05	1.6431E+00	20.78
M 19	333.44	1.3421E+01	4.49
m 20	336.61	2.6526E+00	9.31
M 21	342.19	1.6855E+00	11.60
m 22	345.71	1.2808E+01	4.48
23	368.68	3.0604E+00	15.20
24	375.68	2.3465E+01	3.51
M 25	380.83	6.2822E+00	5.86
m 26	383.41	5.3460E+00	6.04
27	393.57	1.2718E+01	3.46
29	423.24	1.7195E+00	13.85
30	452.10	3.7745E+00	6.40
31	511.34	2.7350E+00	8.82
32	559.01	5.2982E-01	23.61
33	1174.22	8.2028E-01	16.22
34	1333.45	7.3585E-01	15.98

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.38E+02	+/-	1.23E+02		2.48E-02	+/-	3.66E-03
SE-75	<	8.88E-02	+/-	5.66E-03	<	2.63E-06	+/-	1.68E-07
EU-152x	<	1.97E-01	+/-	1.48E-02	<	5.82E-06	+/-	4.38E-07
U-233		9.24E+02	+/-	4.90E+02		2.74E-02	+/-	1.45E-02
U-235		5.61E-02	+/-	2.62E-02		1.66E-06	+/-	7.77E-07
Np-237		3.30E-01	+/-	7.61E-02		9.77E-06	+/-	2.25E-06
Pu-238		2.83E+03	+/-	1.43E+03		8.40E-02	+/-	4.24E-02
U-238		1.16E+00	+/-	5.81E-01		3.42E-05	+/-	1.72E-05
Pu-239		2.84E+05	+/-	9.40E+03		8.41E+00	+/-	2.79E-01
Pu-239A		2.39E+05	+/-	7.30E+03		7.09E+00	+/-	2.16E-01
Am-241		6.19E+03	+/-	2.48E+03		1.83E-01	+/-	7.36E-02
Am-241D		2.37E+04	+/-	6.16E+03		7.01E-01	+/-	1.82E-01
Pu-241		1.20E+05	+/-	2.87E+04		3.57E+00	+/-	8.49E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-233	9.61E-02	+/-	5.09E-02
U-235	2.60E-02	+/-	1.21E-02
Np-237	4.68E-04	+/-	1.08E-04
Pu-238	1.66E-04	+/-	8.35E-05
U-238	3.44E+00	+/-	1.73E+00
Pu-239	4.57E+00	+/-	1.51E-01
Pu-239A	3.85E+00	+/-	1.18E-01
Am-241	1.81E-03	+/-	7.25E-04
Pu-241	1.16E-03	+/-	2.77E-04

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.62E+02	+/-	1.86E+02		2.26E-02	+/-	5.51E-03
SE-75	<	3.45E-01	+/-	3.37E-03	<	1.02E-05	+/-	9.99E-08
EU-152x	<	5.60E-01	+/-	1.07E-02	<	1.66E-05	+/-	3.18E-07
U-233	<	2.75E+04	+/-	6.23E+02	<	8.14E-01	+/-	1.84E-02
U-235	<	4.79E-01	+/-	1.13E-02	<	1.42E-05	+/-	3.36E-07
Np-237		1.82E-01	+/-	1.30E-01		5.39E-06	+/-	3.86E-06
Pu-238	<	3.67E+04	+/-	7.46E+02	<	1.09E+00	+/-	2.21E-02
U-238	<	1.53E+01	+/-	2.45E-01	<	4.52E-04	+/-	7.27E-06
Pu-239		2.89E+05	+/-	7.63E+03		8.58E+00	+/-	2.26E-01
Pu-239A		2.34E+05	+/-	6.39E+03		6.93E+00	+/-	1.89E-01
Am-241	<	2.99E+04	+/-	2.88E+02	<	8.86E-01	+/-	8.54E-03
Am-241D	<	6.22E+04	+/-	6.16E+02	<	1.84E+00	+/-	1.83E-02
Pu-241		1.31E+05	+/-	4.20E+04		3.88E+00	+/-	1.24E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	2.58E-04	+/-	1.85E-04
Pu-239	4.66E+00	+/-	1.23E-01
Pu-239A	3.76E+00	+/-	1.03E-01
Pu-241	1.27E-03	+/-	4.06E-04

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.918	+/-	4.7944
Matrix Longitudinal Ratio:	0.622	+/-	0.1002
Source Vertical Ratio:	0.615	+/-	0.3107
Matrix Vertical Ratio:	0.722	+/-	0.0323

NUDS could not find the transmission peak in one radial segment.

Radioassay Data Sheet — Thu Aug 30 04:35:46 2007

Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: LL85901335	Gross Weight (kg)	: 80.4
Sequence Number	: 2383	Fill Height (%)	: 100.0
Assay Date	: 08/22/07 11:08:31	Density (g/cc)	: 0.24
		Net Weight (kg)	: 50.30
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma			
TRU Alpha Activity Concentration:	7.36e-05	+/-	9.28e-06	Ci/g
Total Pu-239 Equiv Activity:	3.59e+00	+/-	4.42e-01	Ci
Total Pu-239 Fissile Gram Equiv:	2.30e+01	+/-	4.67e+00	g
Decay Heat:	1.20e-01	+/-	1.52e-02	W
Total Pu Mass:	2.45e+01	+/-	4.68e+00	g
TMU:	20.44%			
Waste Classification:	TRU			

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	4.16e-01	9.61e-01
Pu-239	9.35e+01	1.16e-01
Pu-240	5.99e+00	1.78e+00
Pu-241	1.02e-01	2.07e+00
Pu-242	3.00e-02	1.00e+01
Am-241	4.64e-01	1.01e+00
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	1.02e-01	2.08e-02	1.74e+00	3.56e-01	1.39e-03
Pu-239	2.29e+01	4.67e+00	1.42e+00	2.90e-01	8.61e-02
Pu-240	1.46e+00	3.00e-01	3.32e-01	6.82e-02	0.00e+00
Pu-241	2.50e-02	5.14e-03	2.59e+00	5.32e-01	1.13e-03
Pu-242	7.35e-03	1.67e-03	2.88e-05	6.56e-06	0.00e+00
Am-241	6.08e-02	1.29e-02	2.08e-01	4.42e-02	4.13e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	2.34e-03	5.75e-04	1.65e-06	4.05e-07	5.78e-04
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	1.28e-01
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.33e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	1.22e+00
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Robert J Hoslett Jr — 8-30-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85901335
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2383
Assayed on: 08/22/07 11:08:31
Report Generated: 08/30/07 16:35:31
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

Pu-240 Wt Pct <5.99> +/- 2 Sigma error <0.21>
is within limits
Pu-240 Wt Pct error <1.78> is within limits
Pu-238 Wt Pct error <0.96> is within limits
QFIT <1.00> is within limits
REVIEW MGAERR13: Efficiency curvature boundary reached

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.242> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

REVIEW Pu-239/Pu-239a ratio <3.04e+00> > <2.50e+00> OK

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.67> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <0.70> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <0.70> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <0.73> is acceptable in Segment 4
Pulser value <1.00> is within range in Segment 4
DEAD TIME percentage <0.94> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <1.50> is acceptable in Segment 6
Pulser value <1.00> is within range in Segment 6
DEAD TIME percentage <1.97> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <3.75> is acceptable in Segment 8
Pulser value <1.00> is within range in Segment 8
DEAD TIME percentage <6.09> is acceptable in Segment 9
Pulser value <1.00> is within range in Segment 9
DEAD TIME percentage <5.27> is acceptable in Segment 10
Pulser value <1.00> is within range in Segment 10
DEAD TIME percentage <2.80> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.23> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <0.82> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.71> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.68> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15

DEAD TIME percentage <0.63> is acceptable in Segment 16
Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
Transmission results are acceptable in Segment 5
REVIEW Low Transmission Line <136.000000> < <0.001> found in Segment 6 OK
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

REVIEW Reduced chi squared fit value <4.49e+00> exceeds limit <3.00> for energy peak <130.00> in the .A04 OK

Section 7 - FGE MASS REVIEW

FGE Mass <27.63> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

Am-241 ratio <375.69> is above lower limit <200.00> OK
Np-237 ratio <9761.24> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <22.85> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

REVIEW Cs-137 Z Value <2.20> exceeds limit <1.96> OK. Checked.

Independent Reviewer: Robert J. Hackett Jr. Date: 8-30-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85901335
Item Description Code:
Sequence Number: 2383
Assayed on: 08/22/07 11:08:31
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA	
MGAERR13	OK
SECTION 3 - SELF-ABSORPTION	
Pu-239/Pu-239a ratio is greater than upper limit.	OK
SECTION 5 - TRANSMISSION	
Low Transmission Line 136.0 less than 0.001 found in Segment 6	OK. Ratio 129/413 OK.
SECTION 6 - REDUCED CHI SQUARED FIT	
Chi square failure for 130.0 KeV in .A04 Spectrum.	OK
SECTION 9 - IDC COUNT TYPE	
IDC is not available.	N/A
SECTION 12 - CS-137 INTERFERENCE TEST	
Potential Cs-137 presence.	Ok. Checked.

Technical Reviewer: Robert J Haslitt Date: 8-30-07

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*********************************************************************
*****                    M G A   R E P O R T                    *****
*********************************************************************
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Report generated on: 8-30-07 4:01:19 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202383.CNF Sens : 30.0% LT: 54.1 Mins DT: 3.03
Measurement date: 8-22-07 Declared date: 8-22-07

Sample ID: LL85901335 Detector: Total counts: 3.080E+06

Pu g/cm2 = 0.2000 Cd g/cm2 = 1.8000 FWHM at 122 keV = 618 eV
QFIT = 1.00 FWHM at 208 keV = 789 eV
NQFIT = 1.00

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.004451	1.0	0.7	4.0629	1.9	0.41600	0.96	0.41600	0.96
Pu-239	1.000000	0.0	0.8	912.8041	2.1	93.46333	0.12	93.46333	0.12
Pu-240	0.064070	1.9	1.7	58.4835	2.5	5.98821	1.78	5.98821	1.78
Pu-241	0.001096	2.1	1.9	1.0000	0.0	0.10239	2.07	0.10239	2.07
Pu-242	(New alg.	)		0.2934	(10)	0.03005	(10)	0.03005	(10)
Am-241	0.004964	1.0	0.7	4.5308	2.0	0.46392	1.01	0.46392	1.01

Pu-240 effective (meas. date) = 7.087 +/- 1.68%
Am-241 separated about 35.367 +/- 0.299 years ago
Am/Pu-241 weight ratio = 4.53081 +/- 2.02%

Messages :

Lead x-rays detected.
Efficiency curvature boundary reached.
Pu-241/Pu-239 efficiency changed in MGACAL by 1%.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102383.S11
Sample ID: LL85901335 Count Sequence Number: 2383
Assay Start: 8-22-07 11:08:33 AM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 80400.0 g Net: 50300.0 g
Density: 0.242 g /ml

Container Type: 55 Gal Galv 66.3
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv 66.3
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 3:44:55 PM 72717

Reviewed by: Robert J Haslett Jr Date: 8-30-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.23 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.076 +/- 0.0073
SE-75	264.65	0.000 +/- 0.0000	0.140 +/- 0.0064
SE-75	279.53	0.000 +/- 0.0000	0.146 +/- 0.0100
SE-75	400.65	0.000 +/- 0.0000	0.183 +/- 0.0178

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.20	1.47E-01 +/- 9.36E-02	3.89E+00	5.19E-10 +/- 3.65E-09
	2	49.86	1.99E+00 +/- 3.13E-01	2.91E+00	8.06E-07 +/- 2.37E-06
	3	60.22	1.38E+01 +/- 4.53E-01	2.71E+00	6.39E-06 +/- 1.18E-05
	4	99.72	6.07E-01 +/- 2.71E-01	2.40E+00	1.54E-04 +/- 4.14E-05
M	5	126.02	2.67E-01 +/- 9.28E-02	2.30E+00	2.88E-04 +/- 1.89E-05
m	6	130.11	1.07E+00 +/- 1.93E-01	2.29E+00	3.04E-04 +/- 2.21E-05
	7	311.90	2.22E-01 +/- 7.47E-02	1.87E+00	2.76E-04 +/- 1.41E-05
	8	393.59	1.02E-01 +/- 4.53E-02	1.79E+00	2.14E-04 +/- 1.43E-05
	9	413.70	2.54E-01 +/- 7.18E-02	1.77E+00	2.03E-04 +/- 1.44E-05
	10	452.68	5.88E-02 +/- 3.73E-02	1.73E+00	1.84E-04 +/- 1.43E-05
	11	1001.03	1.73E-02 +/- 1.22E-02	1.45E+00	9.18E-05 +/- 4.92E-06
	12	1408.01	2.59E-02 +/- 1.50E-02	1.37E+00	6.92E-05 +/- 5.19E-06
	13	2236.00	1.00E+02 +/- 1.50E+00	1.30E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 114.19 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.096 +/- 0.0076
SE-75	264.65	0.000 +/- 0.0000	0.171 +/- 0.0073
SE-75	279.53	0.000 +/- 0.0000	0.198 +/- 0.0122
SE-75	400.65	0.000 +/- 0.0000	0.194 +/- 0.0193

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.22	1.97E+01 +/- 5.60E-01	2.52E+00	1.33E-04 +/- 2.14E-04
2	100.00	1.34E+00 +/- 2.92E-01	2.24E+00	3.12E-04 +/- 7.29E-05
3	129.29	1.08E+00 +/- 2.06E-01	2.16E+00	3.88E-04 +/- 2.47E-05
4	208.70	5.36E-01 +/- 1.59E-01	1.93E+00	4.25E-04 +/- 4.49E-05
5	333.58	1.15E-01 +/- 7.69E-02	1.74E+00	3.42E-04 +/- 1.64E-05
6	345.53	1.50E-01 +/- 5.66E-02	1.74E+00	3.34E-04 +/- 1.66E-05
7	375.63	3.45E-01 +/- 6.48E-02	1.75E+00	3.13E-04 +/- 1.75E-05
8	413.70	2.76E-01 +/- 6.82E-02	1.74E+00	2.89E-04 +/- 1.85E-05
9	1112.12	3.45E-02 +/- 1.73E-02	1.41E+00	1.18E-04 +/- 5.17E-06
10	1408.01	2.32E-02 +/- 2.19E-02	1.36E+00	1.02E-04 +/- 6.88E-06
11	2236.00	1.00E+02 +/- 1.49E+00	1.29E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 114.20 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.110 +/- 0.0080
SE-75	264.65	0.000 +/- 0.0000	0.184 +/- 0.0074
SE-75	279.53	0.000 +/- 0.0000	0.189 +/- 0.0117
SE-75	400.65	0.000 +/- 0.0000	0.201 +/- 0.0197

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.21	1.57E+01 +/- 5.04E-01	2.41E+00	8.10E-05 +/- 2.79E-05
2	99.71	9.05E-01 +/- 3.12E-01	2.16E+00	2.98E-04 +/- 3.02E-05
3	129.29	4.32E-01 +/- 2.04E-01	2.08E+00	4.18E-04 +/- 2.23E-05
4	208.69	3.19E-01 +/- 1.36E-01	1.88E+00	4.92E-04 +/- 2.59E-05
5	264.66	2.84E-01 +/- 1.42E-01	1.78E+00	4.50E-04 +/- 2.20E-05
6	375.70	2.25E-01 +/- 6.02E-02	1.74E+00	3.46E-04 +/- 1.41E-05
7	413.70	1.26E-01 +/- 7.90E-02	1.72E+00	3.16E-04 +/- 1.28E-05
8	443.98	9.47E-02 +/- 4.71E-02	1.69E+00	2.95E-04 +/- 1.21E-05
9	778.90	7.77E-02 +/- 2.59E-02	1.50E+00	1.66E-04 +/- 8.11E-06
10	1001.03	1.87E-02 +/- 1.81E-02	1.43E+00	1.35E-04 +/- 5.37E-06
11	2236.00	1.00E+02 +/- 1.49E+00	1.28E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 114.16 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.134 +/- 0.0085
SE-75	264.65	0.000 +/- 0.0000	0.242 +/- 0.0088
SE-75	279.53	0.000 +/- 0.0000	0.233 +/- 0.0139
SE-75	400.65	0.000 +/- 0.0000	0.293 +/- 0.0220

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.21	8.66E+00 +/- 4.23E-01	2.27E+00	3.63E-05 +/- 5.77E-05
2	99.66	7.58E-01 +/- 3.06E-01	2.04E+00	2.66E-04 +/- 6.28E-05
3	129.29	4.63E-01 +/- 2.15E-01	1.96E+00	4.12E-04 +/- 2.61E-05
4	375.48	1.49E-01 +/- 8.45E-02	1.56E+00	3.21E-04 +/- 1.71E-05
5	413.70	9.94E-02 +/- 4.90E-02	1.53E+00	2.94E-04 +/- 1.78E-05
6	1112.12	1.75E-02 +/- 1.24E-02	1.30E+00	1.26E-04 +/- 5.66E-06
7	1408.01	1.75E-02 +/- 1.24E-02	1.26E+00	1.06E-04 +/- 7.05E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.21E+00	7.00E-05 +/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 113.92 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.131 +/- 0.0094
SE-75	264.65	0.000 +/- 0.0000	0.195 +/- 0.0083
SE-75	279.53	0.000 +/- 0.0000	0.217 +/- 0.0140
SE-75	400.65	0.000 +/- 0.0000	0.246 +/- 0.0229

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.74	3.22E-01 +/- 1.30E-01	3.20E+00	2.48E-07 +/- 1.66E-06
	2	60.19	1.70E+01 +/- 5.83E-01	2.28E+00	4.80E-05 +/- 8.24E-05
M	3	126.11	5.66E-01 +/- 1.57E-01	1.98E+00	3.97E-04 +/- 2.37E-05
m	4	130.12	1.54E+00 +/- 2.72E-01	1.98E+00	4.10E-04 +/- 2.74E-05
	5	152.68	6.52E-01 +/- 2.50E-01	1.93E+00	4.54E-04 +/- 5.17E-05
	6	208.66	5.48E-01 +/- 2.11E-01	1.83E+00	4.56E-04 +/- 5.12E-05
	7	345.73	5.48E-01 +/- 1.40E-01	1.65E+00	3.33E-04 +/- 1.69E-05
	8	369.24	2.19E-01 +/- 1.21E-01	1.64E+00	3.16E-04 +/- 1.77E-05
	9	375.70	1.34E+00 +/- 1.59E-01	1.64E+00	3.11E-04 +/- 1.79E-05
	10	393.54	7.44E-01 +/- 1.16E-01	1.63E+00	2.99E-04 +/- 1.85E-05
	11	413.70	1.31E+00 +/- 1.23E-01	1.62E+00	2.86E-04 +/- 1.90E-05
	12	423.40	7.21E-02 +/- 5.27E-02	1.61E+00	2.81E-04 +/- 1.91E-05
	13	452.02	2.45E-01 +/- 7.05E-02	1.59E+00	2.65E-04 +/- 1.91E-05
M	14	554.96	5.49E-02 +/- 3.38E-02	1.53E+00	2.21E-04 +/- 1.63E-05
m	15	558.91	7.52E-02 +/- 4.35E-02	1.52E+00	2.20E-04 +/- 1.62E-05
	16	662.42	7.90E-02 +/- 4.35E-02	1.47E+00	1.90E-04 +/- 1.21E-05
	17	722.01	4.46E-02 +/- 3.69E-02	1.45E+00	1.77E-04 +/- 1.01E-05
	18	778.90	3.12E-02 +/- 2.19E-02	1.43E+00	1.66E-04 +/- 8.62E-06
	19	964.13	3.68E-02 +/- 2.68E-02	1.38E+00	1.39E-04 +/- 6.40E-06
	20	2236.00	1.00E+02 +/- 1.50E+00	1.24E+00	5.76E-05 +/- 3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 113.27 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.054 +/- 0.0063
SE-75	279.53	0.000 +/- 0.0000	0.083 +/- 0.0124
SE-75	400.65	0.000 +/- 0.0000	0.084 +/- 0.0165

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.97	9.17E-01 +/- 2.22E-01	4.10E+00	4.59E-07 +/- 2.89E-06
	2	49.99	2.27E+00 +/- 5.32E-01	3.79E+00	2.16E-05 +/- 5.58E-05
	3	60.21	4.64E+01 +/- 1.03E+00	3.49E+00	6.10E-05 +/- 9.95E-05
	4	104.02	8.37E+00 +/- 5.46E-01	3.00E+00	3.31E-04 +/- 6.09E-05
	5	111.66	1.50E+00 +/- 4.95E-01	2.96E+00	3.68E-04 +/- 4.01E-05
M	6	125.97	1.22E+00 +/- 2.12E-01	2.90E+00	4.22E-04 +/- 2.47E-05
m	7	130.03	4.59E+00 +/- 4.23E-01	2.88E+00	4.33E-04 +/- 2.81E-05
	8	152.68	6.82E-01 +/- 4.22E-01	2.79E+00	4.74E-04 +/- 5.16E-05
	9	204.19	1.08E+00 +/- 3.11E-01	2.64E+00	4.75E-04 +/- 5.27E-05
	10	208.64	2.02E+00 +/- 3.03E-01	2.63E+00	4.72E-04 +/- 5.09E-05
	11	311.90	6.24E-01 +/- 2.22E-01	2.22E+00	3.82E-04 +/- 1.81E-05
M	12	333.44	2.26E+00 +/- 2.49E-01	2.21E+00	3.65E-04 +/- 1.73E-05
m	13	336.33	8.69E-01 +/- 1.34E-01	2.21E+00	3.62E-04 +/- 1.73E-05
	14	345.64	2.25E+00 +/- 2.37E-01	2.21E+00	3.55E-04 +/- 1.74E-05
	15	368.32	9.80E-01 +/- 1.93E-01	2.21E+00	3.39E-04 +/- 1.81E-05
	16	375.69	4.98E+00 +/- 3.73E-01	2.22E+00	3.34E-04 +/- 1.84E-05
M	17	380.87	1.31E+00 +/- 1.68E-01	2.22E+00	3.30E-04 +/- 1.86E-05
m	18	383.36	1.13E+00 +/- 1.50E-01	2.22E+00	3.28E-04 +/- 1.87E-05
	19	393.52	2.51E+00 +/- 1.87E-01	2.22E+00	3.22E-04 +/- 1.90E-05
	20	413.70	6.70E+00 +/- 2.77E-01	2.20E+00	3.09E-04 +/- 1.95E-05
	21	423.05	4.01E-01 +/- 1.00E-01	2.18E+00	3.04E-04 +/- 1.96E-05
	22	452.12	9.47E-01 +/- 1.26E-01	2.14E+00	2.88E-04 +/- 1.97E-05
	23	662.42	2.87E-01 +/- 7.59E-02	1.91E+00	2.10E-04 +/- 1.26E-05
	24	722.01	2.62E-01 +/- 5.85E-02	1.86E+00	1.95E-04 +/- 1.05E-05
	25	1408.01	3.38E-02 +/- 2.33E-02	1.56E+00	9.88E-05 +/- 6.79E-06
	26	2236.00	1.00E+02 +/- 1.51E+00	1.45E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 112.74 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.026 +/- 0.0007
SE-75	264.65	0.000 +/- 0.0000	0.092 +/- 0.0073
SE-75	279.53	0.000 +/- 0.0000	0.087 +/- 0.0152
SE-75	400.65	0.000 +/- 0.0000	0.135 +/- 0.0188

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.05	1.11E+00 +/- 2.20E-01	4.10E+00	4.95E-09 +/- 2.83E-08
	2	49.70	4.50E+00 +/- 8.12E-01	3.97E+00	2.67E-06 +/- 6.38E-06
	3	60.20	9.15E+01 +/- 1.58E+00	3.64E+00	1.61E-05 +/- 2.40E-05
	4	103.99	8.14E+00 +/- 6.70E-01	3.13E+00	2.79E-04 +/- 4.80E-05
	5	116.66	1.91E+00 +/- 6.92E-01	3.06E+00	3.68E-04 +/- 2.78E-05
M	6	126.01	2.77E+00 +/- 2.87E-01	3.01E+00	4.24E-04 +/- 2.46E-05
m	7	130.00	8.29E+00 +/- 5.32E-01	2.99E+00	4.45E-04 +/- 2.77E-05
	8	152.68	1.32E+00 +/- 4.19E-01	2.81E+00	5.26E-04 +/- 5.21E-05
	9	208.66	1.95E+00 +/- 4.02E-01	2.43E+00	5.47E-04 +/- 5.32E-05
	10	244.70	5.10E-01 +/- 3.85E-01	2.25E+00	5.05E-04 +/- 3.65E-05
	11	255.98	1.11E+00 +/- 3.50E-01	2.20E+00	4.90E-04 +/- 3.18E-05
	12	267.80	7.84E-01 +/- 4.22E-01	2.17E+00	4.74E-04 +/- 2.75E-05
	13	311.90	5.78E-01 +/- 3.16E-01	2.12E+00	4.17E-04 +/- 1.86E-05
M	14	333.45	2.84E+00 +/- 2.93E-01	2.08E+00	3.91E-04 +/- 1.76E-05
m	15	336.52	1.15E+00 +/- 1.62E-01	2.07E+00	3.88E-04 +/- 1.76E-05
M	16	342.16	3.34E-01 +/- 1.00E-01	2.06E+00	3.82E-04 +/- 1.76E-05
m	17	345.71	2.98E+00 +/- 3.07E-01	2.05E+00	3.78E-04 +/- 1.76E-05
	18	369.03	1.12E+00 +/- 2.24E-01	2.00E+00	3.55E-04 +/- 1.81E-05
	19	375.67	5.71E+00 +/- 4.29E-01	1.99E+00	3.49E-04 +/- 1.82E-05
M	20	380.92	1.27E+00 +/- 1.73E-01	1.98E+00	3.44E-04 +/- 1.83E-05
m	21	383.42	1.24E+00 +/- 1.66E-01	1.98E+00	3.42E-04 +/- 1.84E-05
	22	393.57	2.85E+00 +/- 2.44E-01	1.96E+00	3.33E-04 +/- 1.86E-05
	23	413.70	8.46E+00 +/- 3.21E-01	1.93E+00	3.17E-04 +/- 1.88E-05
M	24	423.32	6.35E-01 +/- 1.25E-01	1.92E+00	3.10E-04 +/- 1.88E-05
m	25	427.04	1.63E-01 +/- 5.34E-02	1.92E+00	3.07E-04 +/- 1.88E-05
	26	443.98	1.23E-01 +/- 8.40E-02	1.90E+00	2.95E-04 +/- 1.87E-05
	27	452.24	8.52E-01 +/- 1.08E-01	1.89E+00	2.90E-04 +/- 1.86E-05
	28	662.42	4.75E-01 +/- 9.37E-02	1.71E+00	2.03E-04 +/- 1.17E-05
	29	722.01	1.44E-01 +/- 6.07E-02	1.67E+00	1.89E-04 +/- 9.99E-06
	30	867.39	3.52E-02 +/- 1.76E-02	1.60E+00	1.62E-04 +/- 7.44E-06
	31	1085.91	1.98E-02 +/- 1.78E-02	1.52E+00	1.35E-04 +/- 5.76E-06
	32	2236.00	1.00E+02 +/- 1.51E+00	1.36E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Instrument ID: SGS Can ID: LL85901335 Count Sequence #: 2383

Elapsed Live Time: 110.69 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.327 +/- 0.0169
SE-75	264.65	0.000 +/- 0.0000	0.427 +/- 0.0144
SE-75	279.53	0.000 +/- 0.0000	0.413 +/- 0.0252
SE-75	400.65	0.000 +/- 0.0000	0.486 +/- 0.0372

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.05	3.42E+00 +/- 4.04E-01	2.05E+00	7.66E-06 +/- 7.44E-06
	2	50.08	6.53E+00 +/- 9.48E-01	1.70E+00	5.96E-05 +/- 2.93E-05
	3	60.19	2.01E+02 +/- 2.95E+00	1.63E+00	1.10E-04 +/- 3.84E-05
	4	99.89	3.62E+01 +/- 1.58E+00	1.53E+00	3.27E-04 +/- 3.28E-05
	5	111.69	4.06E+00 +/- 9.72E-01	1.51E+00	3.75E-04 +/- 2.72E-05
	6	116.12	5.94E+00 +/- 1.00E+00	1.50E+00	3.90E-04 +/- 2.56E-05
M	7	126.02	5.68E+00 +/- 3.91E-01	1.49E+00	4.19E-04 +/- 2.31E-05
m	8	130.02	3.44E+01 +/- 1.06E+00	1.49E+00	4.29E-04 +/- 2.26E-05
	9	152.68	6.97E+00 +/- 6.41E-01	1.46E+00	4.67E-04 +/- 2.32E-05
	10	161.48	1.46E+00 +/- 4.46E-01	1.45E+00	4.75E-04 +/- 2.41E-05
	11	190.14	8.52E-01 +/- 3.10E-01	1.42E+00	4.81E-04 +/- 2.61E-05
	12	196.41	1.28E+00 +/- 5.22E-01	1.42E+00	4.79E-04 +/- 2.62E-05
	13	204.20	1.73E+00 +/- 6.13E-01	1.41E+00	4.76E-04 +/- 2.61E-05
	14	208.68	6.07E+00 +/- 7.28E-01	1.41E+00	4.74E-04 +/- 2.60E-05
	15	255.99	1.06E+00 +/- 4.93E-01	1.36E+00	4.39E-04 +/- 2.28E-05
	16	298.01	4.92E-01 +/- 3.19E-01	1.36E+00	4.01E-04 +/- 1.90E-05
	17	311.90	9.02E-01 +/- 3.25E-01	1.35E+00	3.88E-04 +/- 1.78E-05
	18	321.61	1.83E+00 +/- 3.74E-01	1.34E+00	3.80E-04 +/- 1.71E-05
M	19	333.44	7.13E+00 +/- 4.48E-01	1.34E+00	3.69E-04 +/- 1.62E-05
m	20	336.44	2.68E+00 +/- 2.31E-01	1.34E+00	3.66E-04 +/- 1.60E-05
	21	345.66	6.11E+00 +/- 3.54E-01	1.33E+00	3.59E-04 +/- 1.54E-05
	22	368.63	1.88E+00 +/- 3.71E-01	1.32E+00	3.40E-04 +/- 1.42E-05
	23	375.69	1.23E+01 +/- 6.38E-01	1.31E+00	3.34E-04 +/- 1.38E-05
M	24	380.80	3.40E+00 +/- 2.78E-01	1.31E+00	3.30E-04 +/- 1.36E-05
m	25	383.42	3.52E+00 +/- 2.77E-01	1.31E+00	3.28E-04 +/- 1.35E-05
	26	393.56	6.81E+00 +/- 3.42E-01	1.30E+00	3.21E-04 +/- 1.31E-05
F	27	414.37	1.73E+01 +/- 6.59E-01	1.29E+00	3.06E-04 +/- 1.25E-05
	28	423.23	6.03E-01 +/- 1.71E-01	1.29E+00	3.00E-04 +/- 1.22E-05
	29	452.10	2.30E+00 +/- 1.83E-01	1.28E+00	2.82E-04 +/- 1.16E-05
	30	583.83	2.66E-01 +/- 7.92E-02	1.25E+00	2.19E-04 +/- 1.02E-05
	31	646.66	1.09E-01 +/- 5.43E-02	1.23E+00	1.98E-04 +/- 9.58E-06
	32	662.42	8.38E-01 +/- 1.17E-01	1.23E+00	1.93E-04 +/- 9.41E-06
	33	722.01	2.07E-01 +/- 7.64E-02	1.22E+00	1.78E-04 +/- 8.71E-06
M	34	766.66	2.20E-01 +/- 6.59E-02	1.21E+00	1.68E-04 +/- 8.16E-06
m	35	770.15	1.77E-01 +/- 5.81E-02	1.21E+00	1.68E-04 +/- 8.12E-06
	36	1001.03	6.05E-02 +/- 2.89E-02	1.18E+00	1.35E-04 +/- 5.36E-06
	37	1408.01	9.05E-03 +/- 9.05E-03	1.15E+00	1.13E-04 +/- 7.00E-06

38	2236.00	1.00E+02	+/-	1.53E+00	1.12E+00	1.19E-04	+/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 108.00 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.323 +/- 0.0228
SE-75	264.65	0.000 +/- 0.0000	0.425 +/- 0.0167
SE-75	279.53	0.000 +/- 0.0000	0.454 +/- 0.0288
SE-75	400.65	0.000 +/- 0.0000	0.446 +/- 0.0395

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)		Correction Factor	Original Efficiency	
	1	32.12	5.84E+00	+/- 5.00E-01	2.06E+00	6.47E-09	+/- 3.88E-08
	2	50.10	1.20E+01	+/- 1.42E+00	1.71E+00	3.12E-06	+/- 7.68E-06
	3	60.18	3.92E+02	+/- 5.29E+00	1.64E+00	1.65E-05	+/- 2.58E-05
	4	99.87	6.12E+01	+/- 2.15E+00	1.53E+00	2.39E-04	+/- 5.50E-05
	5	111.70	7.13E+00	+/- 1.24E+00	1.52E+00	3.22E-04	+/- 3.46E-05
	6	116.13	8.67E+00	+/- 1.28E+00	1.51E+00	3.50E-04	+/- 2.80E-05
F	7	129.99	5.19E+01	+/- 1.40E+00	1.50E+00	4.24E-04	+/- 2.73E-05
	8	152.68	1.42E+01	+/- 8.02E-01	1.47E+00	4.97E-04	+/- 5.14E-05
	9	179.68	1.84E+00	+/- 7.11E-01	1.44E+00	5.24E-04	+/- 5.99E-05
	10	204.21	1.24E+00	+/- 8.68E-01	1.41E+00	5.14E-04	+/- 5.34E-05
	11	208.68	1.09E+01	+/- 9.24E-01	1.41E+00	5.11E-04	+/- 5.15E-05
	12	256.14	7.16E-01	+/- 3.80E-01	1.37E+00	4.54E-04	+/- 3.03E-05
	13	268.12	1.27E+00	+/- 6.14E-01	1.35E+00	4.38E-04	+/- 2.61E-05
	14	311.90	1.76E+00	+/- 5.16E-01	1.33E+00	3.83E-04	+/- 1.78E-05
	15	321.32	1.70E+00	+/- 4.11E-01	1.33E+00	3.72E-04	+/- 1.73E-05
M	16	333.40	1.09E+01	+/- 5.67E-01	1.33E+00	3.59E-04	+/- 1.71E-05
m	17	336.35	3.64E+00	+/- 2.93E-01	1.33E+00	3.56E-04	+/- 1.71E-05
	18	345.65	9.71E+00	+/- 4.52E-01	1.33E+00	3.46E-04	+/- 1.72E-05
	19	368.74	3.30E+00	+/- 4.85E-01	1.34E+00	3.24E-04	+/- 1.76E-05
	20	375.66	2.09E+01	+/- 8.60E-01	1.34E+00	3.18E-04	+/- 1.78E-05
M	21	380.81	5.60E+00	+/- 3.77E-01	1.34E+00	3.14E-04	+/- 1.79E-05
m	22	383.39	4.74E+00	+/- 3.27E-01	1.34E+00	3.12E-04	+/- 1.80E-05
	23	393.55	1.03E+01	+/- 4.40E-01	1.34E+00	3.03E-04	+/- 1.81E-05
F	24	414.34	2.99E+01	+/- 8.92E-01	1.33E+00	2.88E-04	+/- 1.83E-05
	25	423.20	1.94E+00	+/- 2.35E-01	1.33E+00	2.82E-04	+/- 1.83E-05
	26	452.13	3.30E+00	+/- 2.20E-01	1.32E+00	2.63E-04	+/- 1.81E-05
	27	583.67	1.85E-01	+/- 8.12E-02	1.28E+00	2.06E-04	+/- 1.40E-05
	28	619.45	3.61E-01	+/- 9.54E-02	1.27E+00	1.95E-04	+/- 1.26E-05
	29	646.62	1.08E-01	+/- 7.22E-02	1.26E+00	1.88E-04	+/- 1.17E-05

M	30	659.52	2.07E-01	+/-	5.63E-02	1.26E+00	1.85E-04	+/- 1.13E-05
m	31	663.06	1.51E+00	+/-	1.83E-01	1.26E+00	1.84E-04	+/- 1.11E-05
	32	722.01	3.05E-01	+/-	9.36E-02	1.25E+00	1.72E-04	+/- 9.44E-06
	33	766.91	2.94E-01	+/-	9.20E-02	1.24E+00	1.64E-04	+/- 8.44E-06
	34	964.13	3.23E-02	+/-	2.51E-02	1.21E+00	1.38E-04	+/- 6.28E-06
	35	983.11	6.44E-02	+/-	3.35E-02	1.20E+00	1.37E-04	+/- 6.17E-06
	36	1112.12	4.62E-02	+/-	2.07E-02	1.19E+00	1.25E-04	+/- 5.44E-06
	37	2236.00	1.00E+02	+/-	1.54E+00	1.14E+00	6.12E-05	+/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 108.94 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.363 +/- 0.0221
SE-75	264.65	0.000 +/- 0.0000	0.544 +/- 0.0177
SE-75	279.53	0.000 +/- 0.0000	0.437 +/- 0.0256
SE-75	400.65	0.000 +/- 0.0000	0.502 +/- 0.0432

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
M	1	32.08	4.20E+00	+/-	3.35E-01	1.93E+00	1.67E-05	+/-	1.66E-05
m	2	34.36	1.89E+00	+/-	2.66E-01	1.86E+00	2.24E-05	+/-	2.02E-05
	3	50.01	1.91E+01	+/-	1.65E+00	1.63E+00	8.40E-05	+/-	4.21E-05
	4	60.19	3.77E+02	+/-	5.09E+00	1.57E+00	1.37E-04	+/-	4.88E-05
	5	99.90	5.20E+01	+/-	2.01E+00	1.47E+00	3.32E-04	+/-	3.37E-05
	6	111.72	5.01E+00	+/-	1.15E+00	1.46E+00	3.72E-04	+/-	2.73E-05
	7	116.13	7.00E+00	+/-	1.19E+00	1.45E+00	3.84E-04	+/-	2.55E-05
M	8	123.81	7.83E-01	+/-	3.53E-01	1.44E+00	4.03E-04	+/-	2.32E-05
m	9	125.97	7.75E+00	+/-	4.58E-01	1.44E+00	4.08E-04	+/-	2.27E-05
m	10	129.98	4.24E+01	+/-	1.20E+00	1.44E+00	4.16E-04	+/-	2.21E-05
	11	152.68	1.17E+01	+/-	7.25E-01	1.40E+00	4.47E-04	+/-	2.25E-05
	12	161.36	1.43E+00	+/-	7.18E-01	1.39E+00	4.54E-04	+/-	2.33E-05
	13	172.13	1.20E+00	+/-	4.54E-01	1.37E+00	4.59E-04	+/-	2.43E-05
	14	196.21	2.15E+00	+/-	5.76E-01	1.33E+00	4.59E-04	+/-	2.52E-05
	15	208.69	9.45E+00	+/-	8.29E-01	1.32E+00	4.56E-04	+/-	2.51E-05
	16	256.01	1.25E+00	+/-	4.68E-01	1.26E+00	4.29E-04	+/-	2.23E-05
	17	268.17	2.34E+00	+/-	6.96E-01	1.27E+00	4.20E-04	+/-	2.12E-05
	18	311.90	1.57E+00	+/-	4.02E-01	1.33E+00	3.87E-04	+/-	1.76E-05
M	19	321.87	1.23E+00	+/-	2.88E-01	1.32E+00	3.79E-04	+/-	1.69E-05
m	20	324.08	1.09E+00	+/-	2.66E-01	1.32E+00	3.78E-04	+/-	1.68E-05
M	21	333.42	9.41E+00	+/-	5.13E-01	1.32E+00	3.71E-04	+/-	1.62E-05
m	22	336.33	3.72E+00	+/-	2.80E-01	1.32E+00	3.68E-04	+/-	1.60E-05

	23	345.66	8.53E+00	+/-	3.94E-01	1.31E+00	3.62E-04	+/-	1.54E-05
	24	375.67	1.79E+01	+/-	7.29E-01	1.30E+00	3.40E-04	+/-	1.40E-05
M	25	380.86	3.90E+00	+/-	3.09E-01	1.29E+00	3.37E-04	+/-	1.38E-05
m	26	383.45	3.94E+00	+/-	3.04E-01	1.29E+00	3.35E-04	+/-	1.37E-05
	27	393.54	7.53E+00	+/-	3.80E-01	1.29E+00	3.28E-04	+/-	1.34E-05
F	28	414.36	2.36E+01	+/-	7.96E-01	1.28E+00	3.15E-04	+/-	1.28E-05
	29	423.17	1.48E+00	+/-	2.07E-01	1.28E+00	3.09E-04	+/-	1.27E-05
	30	452.09	2.91E+00	+/-	2.26E-01	1.27E+00	2.93E-04	+/-	1.22E-05
	31	511.42	2.81E-01	+/-	1.31E-01	1.25E+00	2.62E-04	+/-	1.16E-05
	32	583.79	2.35E-01	+/-	8.44E-02	1.23E+00	2.32E-04	+/-	1.11E-05
	33	619.65	2.51E-01	+/-	6.41E-02	1.23E+00	2.19E-04	+/-	1.08E-05
M	34	659.06	9.93E-02	+/-	4.57E-02	1.22E+00	2.07E-04	+/-	1.03E-05
m	35	663.04	9.10E-01	+/-	1.48E-01	1.22E+00	2.05E-04	+/-	1.03E-05
	36	722.01	4.64E-01	+/-	9.02E-02	1.21E+00	1.89E-04	+/-	9.55E-06
	37	766.86	2.46E-01	+/-	8.98E-02	1.20E+00	1.79E-04	+/-	8.93E-06
	38	787.00	1.24E-01	+/-	5.09E-02	1.20E+00	1.75E-04	+/-	8.64E-06
	39	2236.00	1.00E+02	+/-	1.53E+00	1.12E+00	9.04E-05	+/-	2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 111.78 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.553 +/- 0.0219
SE-75	264.65	0.000 +/- 0.0000	0.657 +/- 0.0182
SE-75	279.53	0.000 +/- 0.0000	0.677 +/- 0.0265
SE-75	400.65	0.000 +/- 0.0000	0.719 +/- 0.0408

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
	1	32.16	3.39E+00	+/-	3.19E-01	1.50E+00	1.32E-03	+/-	8.47E-03
	2	50.25	5.91E+00	+/-	9.14E-01	1.34E+00	5.97E-04	+/-	1.57E-03
	3	60.20	1.76E+02	+/-	2.63E+00	1.31E+00	5.03E-04	+/-	8.45E-04
	4	99.81	3.09E+01	+/-	1.30E+00	1.26E+00	4.09E-04	+/-	1.00E-04
	5	111.70	2.67E+00	+/-	8.23E-01	1.25E+00	4.03E-04	+/-	4.47E-05
	6	116.17	4.15E+00	+/-	8.53E-01	1.25E+00	4.02E-04	+/-	3.22E-05
M	7	125.99	3.06E+00	+/-	2.92E-01	1.25E+00	4.00E-04	+/-	2.37E-05
m	8	130.01	2.53E+01	+/-	8.74E-01	1.24E+00	3.99E-04	+/-	2.64E-05
	9	152.68	4.73E+00	+/-	4.94E-01	1.23E+00	3.97E-04	+/-	4.46E-05
	10	190.08	1.04E+00	+/-	4.35E-01	1.21E+00	3.92E-04	+/-	4.81E-05
	11	196.55	8.09E-01	+/-	3.75E-01	1.20E+00	3.91E-04	+/-	4.67E-05
	12	204.18	1.54E+00	+/-	4.88E-01	1.20E+00	3.89E-04	+/-	4.47E-05
	13	208.69	4.61E+00	+/-	5.85E-01	1.20E+00	3.88E-04	+/-	4.34E-05

	14	256.26	1.16E+00	+/-	3.07E-01	1.17E+00	3.74E-04	+/-	2.77E-05
M	15	321.33	3.87E-01	+/-	1.49E-01	1.15E+00	3.49E-04	+/-	1.64E-05
m	16	323.99	5.41E-01	+/-	1.73E-01	1.15E+00	3.47E-04	+/-	1.64E-05
M	17	333.40	4.40E+00	+/-	3.56E-01	1.14E+00	3.43E-04	+/-	1.63E-05
m	18	336.36	1.30E+00	+/-	1.69E-01	1.14E+00	3.42E-04	+/-	1.63E-05
M	19	342.21	6.22E-01	+/-	1.20E-01	1.14E+00	3.40E-04	+/-	1.65E-05
m	20	345.69	4.26E+00	+/-	3.48E-01	1.14E+00	3.38E-04	+/-	1.66E-05
	21	368.77	1.44E+00	+/-	2.82E-01	1.14E+00	3.28E-04	+/-	1.75E-05
	22	375.67	8.37E+00	+/-	4.80E-01	1.13E+00	3.25E-04	+/-	1.79E-05
M	23	380.83	1.79E+00	+/-	1.94E-01	1.13E+00	3.23E-04	+/-	1.81E-05
m	24	383.35	1.93E+00	+/-	1.98E-01	1.13E+00	3.22E-04	+/-	1.82E-05
	25	393.54	4.21E+00	+/-	2.63E-01	1.13E+00	3.17E-04	+/-	1.87E-05
F	26	414.36	1.08E+01	+/-	5.11E-01	1.13E+00	3.08E-04	+/-	1.94E-05
	27	423.33	6.19E-01	+/-	1.21E-01	1.13E+00	3.04E-04	+/-	1.97E-05
	28	452.21	1.58E+00	+/-	1.43E-01	1.12E+00	2.92E-04	+/-	2.00E-05
	29	662.42	4.14E-01	+/-	8.54E-02	1.10E+00	2.15E-04	+/-	1.30E-05
	30	722.01	1.71E-01	+/-	6.01E-02	1.10E+00	1.97E-04	+/-	1.08E-05
	31	867.39	5.27E-02	+/-	3.53E-02	1.09E+00	1.63E-04	+/-	7.48E-06
	32	2236.00	1.00E+02	+/-	1.52E+00	1.05E+00	5.79E-05	+/-	3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.59 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.658 +/- 0.0205
SE-75	264.65	0.000 +/- 0.0000	0.766 +/- 0.0192
SE-75	279.53	0.000 +/- 0.0000	0.732 +/- 0.0253
SE-75	400.65	0.000 +/- 0.0000	0.757 +/- 0.0381

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.06	5.79E-01 +/- 1.51E-01	1.34E+00	2.40E-09 +/- 1.48E-08
2	50.01	1.75E+00 +/- 5.00E-01	1.24E+00	2.07E-06 +/- 5.24E-06
3	60.20	5.04E+01 +/- 1.07E+00	1.22E+00	1.31E-05 +/- 2.09E-05
4	99.68	2.32E+00 +/- 7.53E-01	1.18E+00	2.35E-04 +/- 5.56E-05
5	104.13	1.83E+00 +/- 4.98E-01	1.18E+00	2.70E-04 +/- 4.85E-05
6	111.82	1.27E+00 +/- 4.67E-01	1.18E+00	3.27E-04 +/- 3.49E-05
7	116.54	8.99E-01 +/- 5.03E-01	1.17E+00	3.59E-04 +/- 2.78E-05
8	129.29	4.93E+00 +/- 4.39E-01	1.17E+00	4.34E-04 +/- 2.74E-05
9	145.04	4.72E-01 +/- 2.73E-01	1.16E+00	4.98E-04 +/- 4.74E-05
10	152.68	1.37E+00 +/- 3.02E-01	1.16E+00	5.19E-04 +/- 5.50E-05
11	204.17	6.29E-01 +/- 2.74E-01	1.13E+00	5.35E-04 +/- 5.73E-05

12	208.65	6.39E-01	+/-	3.05E-01	1.13E+00	5.31E-04	+/-	5.53E-05
13	300.10	4.98E-01	+/-	1.95E-01	1.12E+00	4.04E-04	+/-	1.94E-05
14	311.90	2.33E-01	+/-	1.70E-01	1.12E+00	3.88E-04	+/-	1.81E-05
M 15	333.30	9.20E-01	+/-	1.66E-01	1.12E+00	3.62E-04	+/-	1.72E-05
m 16	336.73	3.41E-01	+/-	9.17E-02	1.12E+00	3.59E-04	+/-	1.72E-05
17	345.69	6.99E-01	+/-	1.56E-01	1.12E+00	3.49E-04	+/-	1.72E-05
18	375.68	1.43E+00	+/-	2.36E-01	1.11E+00	3.19E-04	+/-	1.78E-05
M 19	380.82	4.40E-01	+/-	1.03E-01	1.11E+00	3.14E-04	+/-	1.80E-05
m 20	383.41	2.75E-01	+/-	7.43E-02	1.11E+00	3.12E-04	+/-	1.80E-05
21	393.56	9.02E-01	+/-	1.18E-01	1.11E+00	3.03E-04	+/-	1.82E-05
22	413.70	2.23E+00	+/-	1.58E-01	1.11E+00	2.87E-04	+/-	1.84E-05
23	423.35	1.85E-01	+/-	7.83E-02	1.11E+00	2.80E-04	+/-	1.84E-05
24	452.13	3.05E-01	+/-	7.22E-02	1.10E+00	2.62E-04	+/-	1.82E-05
25	662.42	6.95E-02	+/-	4.81E-02	1.09E+00	1.82E-04	+/-	1.13E-05
26	1085.91	1.88E-02	+/-	1.77E-02	1.06E+00	1.28E-04	+/-	5.60E-06
27	1173.84	1.04E-01	+/-	3.27E-02	1.06E+00	1.22E-04	+/-	5.20E-06
28	2225.32	8.69E-02	+/-	2.75E-02	1.05E+00	6.53E-05	+/-	3.51E-05
29	2236.00	1.00E+02	+/-	1.50E+00	1.05E+00	6.48E-05	+/-	3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 114.06 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.235 +/- 0.0114
SE-75	264.65	0.000 +/- 0.0000	0.378 +/- 0.0117
SE-75	279.53	0.000 +/- 0.0000	0.377 +/- 0.0170
SE-75	400.65	0.000 +/- 0.0000	0.395 +/- 0.0267

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
1	60.15	1.20E+01	+/-	5.08E-01	1.86E+00	2.29E-05	+/-	3.87E-05
2	100.17	1.65E+00	+/-	4.75E-01	1.71E+00	2.55E-04	+/-	6.14E-05
3	129.29	5.27E-01	+/-	4.01E-01	1.66E+00	4.16E-04	+/-	2.70E-05
4	152.68	5.12E-01	+/-	2.15E-01	1.61E+00	4.81E-04	+/-	5.38E-05
5	209.05	3.73E-01	+/-	1.75E-01	1.50E+00	4.87E-04	+/-	5.32E-05
6	375.79	2.15E-01	+/-	8.45E-02	1.40E+00	3.16E-04	+/-	1.85E-05
7	413.70	2.89E-01	+/-	7.26E-02	1.39E+00	2.89E-04	+/-	1.94E-05
8	964.13	4.32E-02	+/-	1.93E-02	1.24E+00	1.45E-04	+/-	6.45E-06
9	1085.91	2.76E-02	+/-	1.97E-02	1.22E+00	1.32E-04	+/-	5.78E-06
10	1333.45	8.00E-02	+/-	3.44E-02	1.20E+00	1.11E-04	+/-	5.81E-06
11	1408.01	2.98E-02	+/-	2.44E-02	1.19E+00	1.05E-04	+/-	7.00E-06
12	2236.00	1.00E+02	+/-	1.49E+00	1.16E+00	5.36E-05	+/-	3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 114.18 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.382 +/- 0.0137
SE-75	264.65	0.000 +/- 0.0000	0.514 +/- 0.0144
SE-75	279.53	0.000 +/- 0.0000	0.524 +/- 0.0200
SE-75	400.65	0.000 +/- 0.0000	0.547 +/- 0.0311

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	49.03	1.37E+00 +/- 3.35E-01	1.60E+00	4.22E-05 +/- 1.09E-04
2	60.19	4.66E+00 +/- 3.60E-01	1.54E+00	9.60E-05 +/- 1.50E-04
3	100.53	1.36E+00 +/- 3.93E-01	1.44E+00	3.24E-04 +/- 7.16E-05
4	129.29	4.03E-01 +/- 2.19E-01	1.42E+00	4.20E-04 +/- 2.62E-05
5	400.66	7.86E-02 +/- 6.16E-02	1.25E+00	3.06E-04 +/- 1.78E-05
6	413.70	1.50E-01 +/- 5.66E-02	1.24E+00	2.98E-04 +/- 1.80E-05
7	512.06	2.72E-01 +/- 6.62E-02	1.22E+00	2.47E-04 +/- 1.68E-05
8	1112.12	3.45E-02 +/- 1.73E-02	1.14E+00	1.26E-04 +/- 5.44E-06
9	2236.00	1.00E+02 +/- 1.49E+00	1.10E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.22 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.199 +/- 0.0100
SE-75	264.65	0.000 +/- 0.0000	0.291 +/- 0.0100
SE-75	279.53	0.000 +/- 0.0000	0.294 +/- 0.0144
SE-75	400.65	0.000 +/- 0.0000	0.337 +/- 0.0236

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.16	2.71E+00 +/- 3.01E-01	1.97E+00	1.23E-05 +/- 2.02E-05
2	100.55	6.69E-01 +/- 2.73E-01	1.80E+00	2.42E-04 +/- 5.56E-05
3	152.68	3.98E-01 +/- 1.69E-01	1.70E+00	4.90E-04 +/- 5.37E-05
4	375.68	7.56E-02 +/- 4.94E-02	1.48E+00	2.88E-04 +/- 1.59E-05
5	1333.35	6.05E-02 +/- 2.29E-02	1.24E+00	9.74E-05 +/- 5.41E-06
6	2236.00	1.00E+02 +/- 1.50E+00	1.19E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.27 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.537 +/- 0.0165
SE-75	264.65	0.000 +/- 0.0000	0.632 +/- 0.0164
SE-75	279.53	0.000 +/- 0.0000	0.599 +/- 0.0218
SE-75	400.65	0.000 +/- 0.0000	0.637 +/- 0.0331

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.15	6.89E-01 +/- 2.00E-01	1.33E+00	5.61E-05 +/- 2.41E-05
2	279.54	2.16E-01 +/- 9.47E-02	1.21E+00	2.37E-04 +/- 1.43E-05
3	300.10	1.55E-01 +/- 1.08E-01	1.20E+00	2.27E-04 +/- 1.31E-05
4	413.70	6.68E-02 +/- 4.51E-02	1.18E+00	1.79E-04 +/- 8.85E-06
5	867.39	2.32E-02 +/- 2.19E-02	1.12E+00	8.96E-05 +/- 5.22E-06
6	1001.03	8.62E-03 +/- 1.94E-02	1.11E+00	7.97E-05 +/- 4.05E-06
7	2236.00	1.00E+02 +/- 1.49E+00	1.07E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85901335
Peak Locate Performed on: 8-30-07 4:33:56 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.74	0.1535	32.04	18.40
2	100.65	0.1580	49.99	13.68
3	121.05	0.0390	60.19	285.96
4	200.36	0.0655	99.85	78.22
5	224.07	0.1047	111.70	38.48
6	233.06	0.1255	116.20	13.62
7	248.00	0.0656	123.88	98.43
8	252.90	0.0656	125.98	98.43
9	260.72	0.0656	130.00	98.43
10	307.52	0.0994	153.42	40.36
11	345.07	0.2695	172.20	6.33
12	360.09	0.2908	179.71	5.38
13	393.43	0.2389	196.38	7.64
14	418.03	0.0817	208.68	63.57
15	512.94	0.2084	256.14	10.12
16	536.80	0.2430	268.06	6.98
17	596.55	0.2461	297.94	6.66
18	625.66	0.1867	312.50	11.57
19	643.69	0.2770	321.51	5.47
20	667.40	0.0956	333.41	41.82
21	673.90	0.1546	336.38	19.71
22	691.99	0.0927	345.66	47.75
23	738.26	0.1473	368.80	14.25
24	752.02	0.0693	375.67	83.76
25	762.01	0.1275	380.83	27.63
26	767.82	0.1379	383.41	24.02
27	787.76	0.0919	393.55	44.07
28	829.37	0.0671	414.35	78.92
29	847.07	0.1368	423.20	21.86
30	904.93	0.1179	452.13	27.88
31	1023.92	0.2149	511.63	6.49
32	1118.82	0.2633	559.08	5.47
33	1168.09	0.2686	583.71	5.27
34	1293.71	0.2477	646.52	6.14
35	1326.69	0.1494	663.01	15.73
36	1446.09	0.1880	722.71	9.82

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	1534.35	0.2239	766.84	6.94
38	2348.02	0.2451	1173.68	5.17
39	2667.51	0.2338	1333.42	5.38
40	4450.03	0.2290	2224.68	5.33
41	4471.94	0.0264	2235.64	408.61

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85901335
Peak Analysis Performed on: 8-30-07 4:33:56 PM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	61-	68	64.74	32.04	1.64E+03	87.42	2.48E+03
	2	94-	104	100.65	49.99	5.66E+03	294.48	3.22E+04
	3	114-	127	121.05	60.19	1.58E+05	513.08	3.79E+04
	4	194-	205	200.36	99.85	2.15E+04	425.19	6.34E+04
	5	217-	228	224.07	111.70	2.45E+03	271.99	2.79E+04
	6	228-	239	233.06	116.20	3.43E+03	278.88	2.88E+04
M	7	246-	267	248.43	123.88	8.14E+01	28.04	1.02E+04
m	8	246-	267	252.63	125.98	3.57E+03	34.73	1.12E+04
m	9	246-	267	260.67	130.00	1.97E+04	68.99	1.03E+04
	10	303-	314	307.52	153.42	3.85E+03	200.46	1.44E+04
	11	338-	350	345.07	172.20	4.42E+02	183.67	1.26E+04
	12	357-	367	360.09	179.71	4.44E+02	154.60	9.82E+03
	13	390-	400	393.43	196.38	8.99E+02	146.20	8.57E+03
	14	413-	425	418.03	208.68	4.01E+03	196.31	1.26E+04
	15	505-	520	512.94	256.14	7.87E+02	141.67	6.41E+03
	16	532-	544	536.80	268.06	2.34E+02	114.53	4.89E+03
	17	593-	603	596.55	297.94	4.52E+02	90.32	3.23E+03
	18	618-	631	625.66	312.50	7.03E+02	106.48	3.86E+03
	19	639-	651	643.69	321.51	9.89E+02	101.36	3.54E+03
M	20	662-	681	667.48	333.41	4.19E+03	115.06	2.43E+03
m	21	662-	681	673.43	336.38	1.39E+03	60.36	2.66E+03
	22	691-	699	691.99	345.66	3.83E+03	91.56	1.89E+03
	23	730-	745	738.26	368.80	1.21E+03	103.37	3.15E+03
	24	745-	759	752.02	375.67	8.17E+03	165.37	6.27E+03
M	25	759-	775	762.33	380.83	1.97E+03	70.92	1.38E+03
m	26	759-	775	767.49	383.41	1.91E+03	67.65	1.19E+03
	27	782-	795	787.76	393.55	4.01E+03	87.55	1.32E+03
	28	821-	837	829.37	414.35	1.13E+04	120.59	1.05E+03
	29	839-	851	847.07	423.20	6.37E+02	51.31	7.60E+02
	30	901-	912	904.93	452.13	1.41E+03	49.13	3.87E+02
	31	1015-	1031	1023.92	511.63	4.00E+02	38.45	3.45E+02
	32	1114-	1122	1118.82	559.08	7.77E+01	20.68	1.64E+02
	33	1159-	1176	1168.09	583.71	6.73E+01	30.75	2.70E+02
	34	1290-	1297	1293.71	646.52	5.84E+01	17.63	1.26E+02
	35	1323-	1334	1326.69	663.01	4.91E+02	30.76	1.78E+02
	36	1442-	1454	1446.09	722.71	2.02E+02	23.09	1.21E+02
	37	1525-	1542	1534.35	766.84	2.22E+02	26.53	1.48E+02

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
38	2343-	2357	2348.02	1173.68	5.30E+01	15.78	6.60E+01
39	2658-	2672	2667.51	1333.42	9.15E+01	14.83	4.45E+01
40	4445-	4460	4450.03	2224.68	5.53E+01	10.03	1.47E+01
41	4461-	4482	4471.94	2235.64	1.83E+05	428.05	1.82E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85901335
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.991	2236.00*	100.00	8.060E+02	1.716E+02
Np-237	0.742	300.10	6.63		
		311.90*	38.60	2.022E+00	3.066E-01
Pu-238	0.961	152.68*	0.00	4.226E+05	2.321E+04
Pu-239	0.970	413.70*	0.00	1.014E+06	2.154E+04
Pu-239A	0.965	129.29*	0.01	3.685E+05	8.455E+03
Am-241	0.976	662.42*	0.00	2.341E+05	1.481E+04
Am-241D	0.965	722.01*	0.00	2.100E+05	2.404E+04

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-30-07 4:33:56 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
	1	32.04	1.4424E+01	5.34
	2	49.99	4.9797E+01	5.21
	3	60.19	1.3897E+03	0.41
	4	99.85	1.8952E+02	1.99
	5	111.70	2.1528E+01	11.12
	6	116.20	3.0144E+01	8.14
M	7	123.88	7.1624E-01	34.43
m	8	125.98	3.1445E+01	1.00
	11	172.20	3.8875E+00	41.56
	12	179.71	3.9031E+00	34.84
	13	196.38	7.9087E+00	16.26
	14	208.68	3.5286E+01	4.90
	15	256.14	6.9258E+00	18.00
	16	268.06	2.0557E+00	49.01
	17	297.94	3.9719E+00	20.01
	19	321.51	8.6968E+00	10.26
M	20	333.41	3.6822E+01	2.76
m	21	336.38	1.2206E+01	4.36
	22	345.66	3.3649E+01	2.41
	23	368.80	1.0681E+01	8.52
	24	375.67	7.1879E+01	2.04
M	25	380.83	1.7338E+01	3.61
m	26	383.41	1.6819E+01	3.55
	27	393.55	3.5290E+01	2.20
	29	423.20	5.6055E+00	8.06
	30	452.13	1.2433E+01	3.49
	31	511.63	3.5229E+00	9.61
	32	559.08	6.8395E-01	26.60
	33	583.71	5.9244E-01	45.66
	34	646.52	5.1408E-01	30.17
	37	766.84	1.9529E+00	11.95
	38	1173.68	4.6606E-01	29.78
	39	1333.42	8.0481E-01	16.22
	40	2224.68	4.8684E-01	18.13

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.81E+02	+/-	1.33E+02		1.75E-02	+/-	2.65E-03
SE-75	<	2.13E-01	+/-	1.31E-02	<	4.24E-06	+/-	2.61E-07
EU-152x	<	2.92E-01	+/-	2.15E-02	<	5.80E-06	+/-	4.27E-07
U-233	<	1.17E+04	+/-	8.87E+02	<	2.33E-01	+/-	1.76E-02
U-235	<	2.77E-01	+/-	1.56E-02	<	5.51E-06	+/-	3.11E-07
Np-237		1.65E+00	+/-	2.36E-01		3.28E-05	+/-	4.70E-06
Pu-238		3.90E+05	+/-	2.22E+04		7.75E+00	+/-	4.42E-01
U-238		3.61E+00	+/-	1.48E+00		7.17E-05	+/-	2.94E-05
Pu-239		8.56E+05	+/-	2.49E+04		1.70E+01	+/-	4.95E-01
Pu-239A		2.82E+05	+/-	8.58E+03		5.60E+00	+/-	1.71E-01
Am-241		2.08E+05	+/-	1.51E+04		4.14E+00	+/-	3.01E-01
Am-241D		1.61E+05	+/-	1.92E+04		3.20E+00	+/-	3.82E-01
Pu-241	<	1.17E+05	+/-	5.83E+03	<	2.32E+00	+/-	1.16E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	2.34E-03	+/-	3.35E-04
Pu-238	2.28E-02	+/-	1.30E-03
U-238	1.07E+01	+/-	4.41E+00
Pu-239	1.38E+01	+/-	4.01E-01
Pu-239A	4.54E+00	+/-	1.38E-01
Am-241	6.08E-02	+/-	4.42E-03

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.06E+02	+/-	1.72E+02		1.60E-02	+/-	3.41E-03
SE-75	<	8.04E-01	+/-	6.80E-03	<	1.60E-05	+/-	1.35E-07
EU-152x	<	7.69E-01	+/-	1.31E-02	<	1.53E-05	+/-	2.60E-07
U-233	<	4.73E+04	+/-	9.66E+02	<	9.41E-01	+/-	1.92E-02
U-235	<	1.13E+00	+/-	2.46E-02	<	2.24E-05	+/-	4.89E-07
Np-237		2.02E+00	+/-	3.07E-01		4.02E-05	+/-	6.10E-06
Pu-238		4.23E+05	+/-	2.32E+04		8.40E+00	+/-	4.61E-01
U-238	<	1.71E+01	+/-	2.68E-01	<	3.40E-04	+/-	5.32E-06
Pu-239		1.01E+06	+/-	2.15E+04		2.02E+01	+/-	4.28E-01
Pu-239A		3.68E+05	+/-	8.46E+03		7.33E+00	+/-	1.68E-01
Am-241		2.34E+05	+/-	1.48E+04		4.65E+00	+/-	2.94E-01
Am-241D		2.10E+05	+/-	2.40E+04		4.18E+00	+/-	4.78E-01
Pu-241	<	4.80E+05	+/-	8.37E+03	<	9.54E+00	+/-	1.66E-01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	2.87E-03	+/-	4.35E-04
Pu-238	2.47E-02	+/-	1.36E-03
Pu-239	1.63E+01	+/-	3.47E-01
Pu-239A	5.93E+00	+/-	1.36E-01
Am-241	6.84E-02	+/-	4.32E-03

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.893	+/-	3.7955
Matrix Longitudinal Ratio:	0.925	+/-	0.4253
Source Vertical Ratio:	0.761	+/-	0.3727
Matrix Vertical Ratio:	0.918	+/-	0.1113

NUDS could not find the transmission peak in one radial segment.
NUDS could not find the source peak in one radial segment.

Radioassay Data Sheet — Thu Sep 6 05:24:54 2007

Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: LL85101018	Gross Weight (kg)	: 57.6
Sequence Number	: 2384	Fill Height (%)	: 100.0
Assay Date	: 08/22/07 13:34:48	Density (g/cc)	: 0.12
		Net Weight (kg)	: 25.80
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma			
TRU Alpha Activity Concentration:	1.24e-04	+/-	1.44e-05	Ci/g
Total Pu-239 Equiv Activity:	3.48e+00	+/-	3.74e-01	Ci
Total Pu-239 Fissile Gram Equiv:	3.19e+01	+/-	5.51e+00	g
Decay Heat:	1.03e-01	+/-	1.17e-02	W
Total Pu Mass:	3.39e+01	+/-	5.53e+00	g
TMU:	17.49%			
Waste Classification:	TRU			

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	1.69e-02	8.13e+00
Pu-239	9.30e+01	1.07e-01
Pu-240	6.53e+00	1.52e+00
Pu-241	4.18e-01	7.97e-01
Pu-242	4.72e-02	1.00e+01
Am-241	7.77e-01	7.68e-01
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	5.71e-03	1.10e-03	9.78e-02	1.89e-02	1.92e-03
Pu-239	3.15e+01	5.51e+00	1.96e+00	3.42e-01	1.60e-01
Pu-240	2.21e+00	3.88e-01	5.02e-01	8.82e-02	0.00e+00
Pu-241	1.42e-01	2.48e-02	1.47e+01	2.57e+00	1.52e-03
Pu-242	1.60e-02	3.22e-03	6.28e-05	1.27e-05	0.00e+00
Am-241	1.88e-01	3.24e-02	6.43e-01	1.11e-01	5.52e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	6.34e-03	1.12e-03	4.47e-06	7.88e-07	6.46e-04
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	2.00e-01
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.83e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	1.68e+00
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Robert J. Hazlitt — 9-6-07

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: LL85101018
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2384
Assayed on: 08/22/07 13:34:48
Report Generated: 09/06/07 17:24:38
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

OK

REVIEW Pu-240 Wt Pct -2 Sigma error <6.33> greater than <5.87> Review MGA R
Pu-240 Wt Pct error <1.52> is within limits
Pu-238 Wt Pct error <8.13> is within limits
REVIEW QFIT <1.22> > <1.20> Review MGA Results OK
REVIEW MGAERR13: Efficiency curvature boundary reached OK

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.124> g/cc is within UPPER and LOWER limits

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Section 3 - SELF-ABSORPTION REVIEW

REVIEW Pu-239/Pu-239a ratio <2.75e+00> > <2.50e+00> OK

Section 4 - PULSER REVIEW

DEAD TIME percentage <0.78> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <0.88> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <0.94> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <1.08> is acceptable in Segment 4
Pulser value <0.99> is within range in Segment 4
DEAD TIME percentage <1.29> is acceptable in Segment 5
Pulser value <0.99> is within range in Segment 5
DEAD TIME percentage <1.85> is acceptable in Segment 6
Pulser value <0.99> is within range in Segment 6
DEAD TIME percentage <5.49> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <12.37> is acceptable in Segment 8
Pulser value <1.00> is within range in Segment 8
DEAD TIME percentage <10.90> is acceptable in Segment 9
Pulser value <1.00> is within range in Segment 9
DEAD TIME percentage <3.53> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <1.48> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.10> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <0.98> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.88> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.76> is acceptable in Segment 15
Pulser value <0.98> is within range in Segment 15
DEAD TIME percentage <0.70> is acceptable in Segment 16

Pulser value <0.99> is within range in Segment 16

Section 5 - TRANSMISSION REVIEW

Transmission results are acceptable in Segment 1
Transmission results are acceptable in Segment 2
Transmission results are acceptable in Segment 3
Transmission results are acceptable in Segment 4
Transmission results are acceptable in Segment 5
Transmission results are acceptable in Segment 6
Transmission results are acceptable in Segment 7
Transmission results are acceptable in Segment 8
Transmission results are acceptable in Segment 9
Transmission results are acceptable in Segment 10
Transmission results are acceptable in Segment 11
Transmission results are acceptable in Segment 12
Transmission results are acceptable in Segment 13
Transmission results are acceptable in Segment 14
Transmission results are acceptable in Segment 15
Transmission results are acceptable in Segment 16

Section 6 - REDUCED CHI SQUARED FIT REVIEW

REVIEW Reduced chi squared fit value <3.99e+00> exceeds limit <3.00> for energy peak <129.98> in Segment 9 OK

Section 7 - FGE MASS REVIEW

FGE Mass <37.40> is within limits

Section 8 - PERCENT FULL REVIEW

Percent Full <100.0> is above lower limit <30.0>

Section 9 - IDC COUNT TYPE REVIEW

REVIEW IDC is not available

Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

REVIEW Am-241 ratio <167.68> is below lower limit <200.00> OK
Np-237 ratio <4971.74> is above lower limit <125.00> OK

Section 11 - PU-239 CALIBRATION RANGE REVIEW

Pu-239 <31.52> is within limits

Section 12 - CS-137 INTERFERENCE REVIEW

Am-241D > Am-241A: Calculation not performed OK

Independent Reviewer: Robert J Hoskitt Jr Date: 9-6-07

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: LL85101018
Item Description Code:
Sequence Number: 2384
Assayed on: 08/22/07 13:34:48
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA	
Pu-240 Wt Pct -2 Sigma error is greater than upper limit.	OK
QFIT is greater than upper limit.	OK. NQFIT OK.
MGAERR13	
SECTION 3 - SELF-ABSORPTION	
Pu-239/Pu-239a ratio is greater than upper limit.	OK.
SECTION 6 - REDUCED CHI SQUARED FIT	
Chi square failure for 130.0 Kev in Segment 9	OK.
SECTION 9 - IDC COUNT TYPE	
IDC is not available.	
SECTION 10 - AM-241 & NP-237 INTERFERENCE TEST	
Possible Am-241 interference with 129 KeV peak.	OK. Checked.

Technical Reviewer: Robert J Haskitt Date: 9-6-07

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*************************************************************************
*****                        M G A   R E P O R T                    *****
*************************************************************************
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Report generated on: 9-06-07 5:01:03 PM

MGA version: MGA V9.5 CI

Spectrum ID: 11202384.CNF Sens : 30.0% LT: 52.8 Mins DT: 5.68
Measurement date: 8-22-07 Declared date: 8-22-07

Sample ID: LL85101018 Detector: Total counts: 5.489E+06

Pu g/cm2 = 0.3500 Cd g/cm2 = 1.8500 FWHM at 122 keV = 611 eV
QFIT = 1.22 FWHM at 208 keV = 771 eV
NQFIT = 1.02

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000181	8.1	8.1	0.0403	8.1	0.01686	8.13	0.01686	8.13
Pu-239	1.000000	0.0	0.7	222.3306	0.8	92.98856	0.11	92.98856	0.11
Pu-240	0.070214	1.6	1.5	15.6108	1.6	6.52912	1.52	6.52912	1.52
Pu-241	0.004498	0.8	0.7	1.0000	0.0	0.41824	0.80	0.41824	0.80
Pu-242	(New alg.	)		0.1129	(10)	0.04722	(10)	0.04722	(10)
Am-241	0.008351	0.8	0.5	1.8566	0.8	0.77650	0.77	0.77650	0.77

Pu-240 effective (meas. date) = 6.651 +/- 1.62%
Am-241 separated about 21.733 +/- 0.191 years ago
Am/Pu-241 weight ratio = 1.85657 +/- 0.82%

Messages :

Lead x-rays detected.
Efficiency curvature boundary reached.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102384.S11
Sample ID: LL85101018 Count Sequence Number: 2384
Assay Start: 8-22-07 1:34:50 PM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 57600.0 g Net: 25800.0 g
Density: 0.124 g /ml

Container Type: 55 Gal Galv
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: 55 Gal Galv
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 4:21:04 PM 70097

Reviewed by: Robert J Hashitt Jr Date: 9-6-07

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 114.10 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.329 +/- 0.0143
SE-75	264.65	0.000 +/- 0.0000	0.428 +/- 0.0131
SE-75	279.53	0.000 +/- 0.0000	0.424 +/- 0.0183
SE-75	400.65	0.000 +/- 0.0000	0.489 +/- 0.0290

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.89	3.28E-01 +/- 1.29E-01	2.05E+00	4.21E-10 +/- 3.01E-09
2	49.29	2.48E+00 +/- 3.72E-01	1.71E+00	6.98E-07 +/- 2.10E-06
3	60.20	4.90E+00 +/- 3.28E-01	1.63E+00	6.37E-06 +/- 1.17E-05
4	99.35	9.37E-01 +/- 4.11E-01	1.52E+00	1.51E-04 +/- 4.18E-05
5	129.29	1.95E+00 +/- 2.68E-01	1.49E+00	3.01E-04 +/- 2.13E-05
6	208.86	3.61E-01 +/- 1.70E-01	1.40E+00	3.80E-04 +/- 4.53E-05
7	375.87	3.98E-01 +/- 8.80E-02	1.31E+00	2.25E-04 +/- 1.40E-05
8	393.32	2.41E-01 +/- 5.58E-02	1.30E+00	2.14E-04 +/- 1.43E-05
9	413.70	3.95E-01 +/- 8.61E-02	1.29E+00	2.03E-04 +/- 1.44E-05
10	443.98	1.20E-01 +/- 6.15E-02	1.28E+00	1.88E-04 +/- 1.44E-05
11	867.39	3.21E-02 +/- 3.01E-02	1.19E+00	1.02E-04 +/- 5.64E-06
12	2236.00	1.00E+02 +/- 1.49E+00	1.12E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 113.99 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.209 +/- 0.0125
SE-75	264.65	0.000 +/- 0.0000	0.327 +/- 0.0110
SE-75	279.53	0.000 +/- 0.0000	0.316 +/- 0.0160
SE-75	400.65	0.000 +/- 0.0000	0.378 +/- 0.0257

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	49.23	2.35E+00 +/- 4.22E-01	2.06E+00	7.99E-05 +/- 2.11E-04
2	60.24	1.05E+01 +/- 5.04E-01	1.94E+00	1.33E-04 +/- 2.14E-04
3	95.47	6.05E-01 +/- 3.06E-01	1.78E+00	2.95E-04 +/- 8.94E-05
4	99.25	6.87E-01 +/- 4.64E-01	1.77E+00	3.09E-04 +/- 7.55E-05
5	129.29	2.63E+00 +/- 3.34E-01	1.72E+00	3.88E-04 +/- 2.47E-05
6	152.68	4.68E-01 +/- 2.33E-01	1.67E+00	4.18E-04 +/- 4.48E-05
7	346.10	2.29E-01 +/- 8.29E-02	1.45E+00	3.33E-04 +/- 1.66E-05
8	375.80	3.60E-01 +/- 7.99E-02	1.43E+00	3.13E-04 +/- 1.76E-05
9	393.36	3.54E-01 +/- 7.73E-02	1.42E+00	3.02E-04 +/- 1.81E-05
10	413.70	4.78E-01 +/- 8.83E-02	1.41E+00	2.89E-04 +/- 1.85E-05
11	964.13	2.39E-02 +/- 2.12E-02	1.25E+00	1.32E-04 +/- 6.07E-06
12	1408.01	8.69E-03 +/- 1.95E-02	1.20E+00	1.02E-04 +/- 6.88E-06
13	2236.00	1.00E+02 +/- 1.50E+00	1.17E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 113.92 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.251 +/- 0.0130
SE-75	264.65	0.000 +/- 0.0000	0.354 +/- 0.0115
SE-75	279.53	0.000 +/- 0.0000	0.375 +/- 0.0172
SE-75	400.65	0.000 +/- 0.0000	0.424 +/- 0.0281

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.27	7.55E-01 +/- 1.51E-01	2.34E+00	3.61E-06 +/- 3.42E-06
2	49.48	2.56E+00 +/- 4.81E-01	1.91E+00	3.71E-05 +/- 1.83E-05
3	60.21	1.26E+01 +/- 5.72E-01	1.81E+00	8.09E-05 +/- 2.79E-05
4	104.18	1.33E+00 +/- 3.72E-01	1.66E+00	3.20E-04 +/- 2.86E-05
5	111.60	5.45E-01 +/- 2.43E-01	1.65E+00	3.54E-04 +/- 2.60E-05
6	129.29	2.50E+00 +/- 3.19E-01	1.62E+00	4.18E-04 +/- 2.23E-05
7	152.68	4.37E-01 +/- 2.67E-01	1.59E+00	4.70E-04 +/- 2.29E-05
8	208.72	8.20E-01 +/- 1.81E-01	1.51E+00	4.92E-04 +/- 2.59E-05
9	264.66	2.48E-01 +/- 1.82E-01	1.45E+00	4.50E-04 +/- 2.20E-05
10	279.54	2.43E-01 +/- 1.83E-01	1.42E+00	4.36E-04 +/- 2.07E-05
11	333.52	2.89E-01 +/- 1.06E-01	1.39E+00	3.84E-04 +/- 1.63E-05
12	375.68	4.45E-01 +/- 9.29E-02	1.37E+00	3.46E-04 +/- 1.41E-05
13	393.35	2.20E-01 +/- 6.08E-02	1.36E+00	3.32E-04 +/- 1.34E-05
14	413.70	5.48E-01 +/- 8.00E-02	1.36E+00	3.16E-04 +/- 1.28E-05
15	867.39	4.11E-02 +/- 3.15E-02	1.24E+00	1.51E-04 +/- 6.93E-06
16	964.13	3.68E-02 +/- 2.84E-02	1.22E+00	1.39E-04 +/- 5.75E-06
17	2236.00	1.00E+02 +/- 1.50E+00	1.15E+00	1.32E-04 +/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 113.76 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.324 +/- 0.0147
SE-75	264.65	0.000 +/- 0.0000	0.479 +/- 0.0141
SE-75	279.53	0.000 +/- 0.0000	0.477 +/- 0.0204
SE-75	400.65	0.000 +/- 0.0000	0.477 +/- 0.0296

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	49.50	2.14E+00 +/- 4.65E-01	1.72E+00	9.71E-06 +/- 2.50E-05
2	60.17	1.60E+01 +/- 6.29E-01	1.64E+00	3.62E-05 +/- 5.76E-05
3	99.29	9.25E-01 +/- 5.59E-01	1.53E+00	2.63E-04 +/- 6.36E-05
4	129.29	2.27E+00 +/- 3.78E-01	1.50E+00	4.12E-04 +/- 2.61E-05

5	148.57	5.86E-01	+/-	3.26E-01	1.46E+00	4.63E-04	+/- 4.66E-05
6	345.94	1.16E-01	+/-	7.80E-02	1.31E+00	3.46E-04	+/- 1.65E-05
7	375.74	2.85E-01	+/-	1.23E-01	1.31E+00	3.21E-04	+/- 1.71E-05
8	393.65	2.60E-01	+/-	7.91E-02	1.31E+00	3.07E-04	+/- 1.75E-05
9	413.70	5.40E-01	+/-	7.97E-02	1.30E+00	2.94E-04	+/- 1.78E-05
10	558.53	7.77E-02	+/-	2.93E-02	1.26E+00	2.22E-04	+/- 1.49E-05
11	722.01	4.67E-02	+/-	2.58E-02	1.22E+00	1.77E-04	+/- 9.59E-06
12	778.90	4.35E-02	+/-	1.95E-02	1.21E+00	1.66E-04	+/- 8.40E-06
13	2236.00	1.00E+02	+/-	1.50E+00	1.12E+00	7.00E-05	+/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 113.52 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.353 +/- 0.0157
SE-75	264.65	0.000 +/- 0.0000	0.471 +/- 0.0142
SE-75	279.53	0.000 +/- 0.0000	0.472 +/- 0.0212
SE-75	400.65	0.000 +/- 0.0000	0.490 +/- 0.0304

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
1	32.13	7.56E-01	+/-	1.79E-01	1.96E+00	2.85E-07	+/-	1.87E-06
2	48.90	1.88E+00	+/-	5.89E-01	1.66E+00	1.36E-05	+/-	3.88E-05
3	60.18	2.32E+01	+/-	7.69E-01	1.58E+00	4.80E-05	+/-	8.23E-05
4	99.20	1.01E+00	+/-	5.79E-01	1.49E+00	2.77E-04	+/-	7.15E-05
5	104.09	8.94E-01	+/-	5.29E-01	1.48E+00	3.04E-04	+/-	5.79E-05
6	129.29	1.66E+00	+/-	3.97E-01	1.45E+00	4.07E-04	+/-	2.65E-05
7	345.57	3.85E-01	+/-	1.46E-01	1.30E+00	3.34E-04	+/-	1.69E-05
8	375.70	4.82E-01	+/-	9.80E-02	1.30E+00	3.11E-04	+/-	1.79E-05
9	413.70	2.88E-01	+/-	8.32E-02	1.29E+00	2.86E-04	+/-	1.90E-05
10	964.13	2.83E-02	+/-	2.05E-02	1.18E+00	1.39E-04	+/-	6.40E-06
11	1001.03	5.66E-02	+/-	3.50E-02	1.18E+00	1.35E-04	+/-	6.17E-06
12	2236.00	1.00E+02	+/-	1.50E+00	1.12E+00	5.76E-05	+/-	3.29E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 112.87 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.389 +/- 0.0173
SE-75	264.65	0.000 +/- 0.0000	0.480 +/- 0.0143
SE-75	279.53	0.000 +/- 0.0000	0.530 +/- 0.0238
SE-75	400.65	0.000 +/- 0.0000	0.562 +/- 0.0330

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.01	9.74E-01 +/- 2.06E-01	1.86E+00	4.65E-07 +/- 2.93E-06
2	49.42	3.10E+00 +/- 7.70E-01	1.58E+00	2.00E-05 +/- 5.32E-05
3	60.15	4.91E+01 +/- 1.11E+00	1.52E+00	6.07E-05 +/- 9.93E-05
4	67.79	1.22E+00 +/- 4.82E-01	1.50E+00	1.03E-04 +/- 1.20E-04
5	99.37	4.21E+00 +/- 9.71E-01	1.44E+00	3.06E-04 +/- 7.49E-05
6	104.15	1.69E+00 +/- 6.55E-01	1.43E+00	3.32E-04 +/- 6.06E-05
7	111.61	2.60E+00 +/- 7.65E-01	1.42E+00	3.68E-04 +/- 4.02E-05
8	129.29	4.35E+00 +/- 5.12E-01	1.41E+00	4.31E-04 +/- 2.73E-05
9	208.68	3.16E+00 +/- 3.79E-01	1.34E+00	4.72E-04 +/- 5.09E-05
10	235.19	5.96E-01 +/- 2.46E-01	1.32E+00	4.52E-04 +/- 3.94E-05
11	244.70	4.78E-01 +/- 3.46E-01	1.32E+00	4.43E-04 +/- 3.54E-05
M 12	333.52	7.18E-01 +/- 1.73E-01	1.25E+00	3.65E-04 +/- 1.73E-05
m 13	336.32	3.42E-01 +/- 1.15E-01	1.25E+00	3.62E-04 +/- 1.73E-05
14	345.61	8.41E-01 +/- 2.50E-01	1.25E+00	3.55E-04 +/- 1.74E-05
15	375.72	1.13E+00 +/- 2.00E-01	1.24E+00	3.34E-04 +/- 1.84E-05
16	380.77	5.60E-01 +/- 1.38E-01	1.24E+00	3.30E-04 +/- 1.86E-05
17	393.75	8.99E-01 +/- 1.51E-01	1.24E+00	3.22E-04 +/- 1.90E-05
18	413.70	1.63E+00 +/- 1.65E-01	1.23E+00	3.09E-04 +/- 1.95E-05
19	662.42	7.28E-02 +/- 5.93E-02	1.18E+00	2.10E-04 +/- 1.26E-05
20	722.01	6.25E-02 +/- 4.29E-02	1.17E+00	1.95E-04 +/- 1.05E-05
21	867.39	6.14E-02 +/- 2.32E-02	1.15E+00	1.66E-04 +/- 7.45E-06
22	1001.03	4.38E-02 +/- 1.96E-02	1.14E+00	1.45E-04 +/- 6.25E-06
23	2236.00	1.00E+02 +/- 1.50E+00	1.10E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 108.69 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.303 +/- 0.0229
SE-75	264.65	0.000 +/- 0.0000	0.495 +/- 0.0174
SE-75	279.53	0.000 +/- 0.0000	0.502 +/- 0.0289
SE-75	400.65	0.000 +/- 0.0000	0.584 +/- 0.0460

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.99	3.67E+00 +/- 3.84E-01	2.14E+00	4.80E-09 +/- 2.76E-08
	2	50.32	1.01E+01 +/- 1.32E+00	1.76E+00	3.05E-06 +/- 7.08E-06
	3	60.19	2.64E+02 +/- 3.71E+00	1.68E+00	1.61E-05 +/- 2.39E-05
	4	99.40	4.33E+01 +/- 1.74E+00	1.57E+00	2.44E-04 +/- 5.51E-05
M	5	111.75	2.25E+01 +/- 9.32E-01	1.55E+00	3.35E-04 +/- 3.48E-05
m	6	115.05	1.96E+01 +/- 8.68E-01	1.54E+00	3.58E-04 +/- 2.98E-05
m	7	117.23	9.35E+00 +/- 6.55E-01	1.54E+00	3.72E-04 +/- 2.71E-05
F	8	130.01	3.75E+01 +/- 1.21E+00	1.53E+00	4.45E-04 +/- 2.77E-05
	9	148.57	1.08E+01 +/- 6.92E-01	1.49E+00	5.16E-04 +/- 4.85E-05
	10	196.24	1.08E+00 +/- 6.66E-01	1.39E+00	5.56E-04 +/- 5.79E-05
	11	208.67	6.08E+01 +/- 1.30E+00	1.37E+00	5.47E-04 +/- 5.32E-05
	12	255.95	2.01E+00 +/- 5.49E-01	1.30E+00	4.90E-04 +/- 3.18E-05
	13	268.27	2.34E+00 +/- 6.12E-01	1.29E+00	4.73E-04 +/- 2.74E-05
M	14	298.25	5.65E-01 +/- 2.22E-01	1.27E+00	4.34E-04 +/- 2.02E-05
m	15	300.78	5.46E-01 +/- 2.17E-01	1.27E+00	4.30E-04 +/- 1.98E-05
	16	311.90	2.35E+00 +/- 3.94E-01	1.26E+00	4.17E-04 +/- 1.86E-05
M	17	321.52	1.09E+00 +/- 3.07E-01	1.26E+00	4.05E-04 +/- 1.79E-05
m	18	323.76	1.46E+00 +/- 3.43E-01	1.26E+00	4.02E-04 +/- 1.79E-05
M	19	333.31	1.34E+01 +/- 5.84E-01	1.25E+00	3.92E-04 +/- 1.76E-05
m	20	336.20	5.80E+00 +/- 3.34E-01	1.25E+00	3.88E-04 +/- 1.76E-05
	21	345.65	8.39E+00 +/- 4.02E-01	1.25E+00	3.78E-04 +/- 1.76E-05
	22	368.97	1.04E+00 +/- 5.36E-01	1.23E+00	3.55E-04 +/- 1.81E-05
	23	375.68	1.79E+01 +/- 7.44E-01	1.23E+00	3.49E-04 +/- 1.82E-05
M	24	380.77	3.79E+00 +/- 3.12E-01	1.23E+00	3.44E-04 +/- 1.83E-05
m	25	383.37	3.86E+00 +/- 3.04E-01	1.23E+00	3.42E-04 +/- 1.84E-05
	26	393.52	8.47E+00 +/- 4.07E-01	1.22E+00	3.33E-04 +/- 1.86E-05
F	27	414.35	2.25E+01 +/- 7.61E-01	1.21E+00	3.16E-04 +/- 1.88E-05
M	28	423.26	1.82E+00 +/- 2.25E-01	1.21E+00	3.10E-04 +/- 1.88E-05
m	29	426.91	4.11E-01 +/- 9.00E-02	1.21E+00	3.07E-04 +/- 1.88E-05
	30	452.02	2.92E+00 +/- 2.10E-01	1.21E+00	2.90E-04 +/- 1.86E-05
	31	619.40	5.15E-01 +/- 9.73E-02	1.17E+00	2.16E-04 +/- 1.32E-05
	32	653.35	2.47E-01 +/- 1.14E-01	1.17E+00	2.06E-04 +/- 1.20E-05
	33	662.42	2.31E+00 +/- 1.75E-01	1.17E+00	2.03E-04 +/- 1.17E-05
	34	689.24	2.02E-01 +/- 7.72E-02	1.16E+00	1.96E-04 +/- 1.09E-05
	35	722.01	1.05E+00 +/- 1.15E-01	1.16E+00	1.89E-04 +/- 9.99E-06
	36	1085.91	7.87E-02 +/- 3.79E-02	1.13E+00	1.35E-04 +/- 5.76E-06
	37	2236.00	1.00E+02 +/- 1.53E+00	1.09E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 100.77 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.193 +/- 0.0218
SE-75	264.65	0.000 +/- 0.0000	0.349 +/- 0.0171
SE-75	279.53	0.000 +/- 0.0000	0.361 +/- 0.0346
SE-75	400.65	0.000 +/- 0.0000	0.460 +/- 0.0509

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.09	1.29E+01 +/- 7.56E-01	2.68E+00	7.71E-06 +/- 7.49E-06
	2	50.19	3.27E+01 +/- 2.14E+00	2.11E+00	6.01E-05 +/- 2.95E-05
	3	60.17	7.45E+02 +/- 9.74E+00	2.00E+00	1.10E-04 +/- 3.84E-05
	4	99.38	1.35E+02 +/- 2.94E+00	1.82E+00	3.25E-04 +/- 3.31E-05
	5	103.94	1.31E+02 +/- 2.70E+00	1.81E+00	3.45E-04 +/- 3.08E-05
M	6	111.68	5.77E+01 +/- 1.57E+00	1.79E+00	3.75E-04 +/- 2.73E-05
m	7	115.04	5.30E+01 +/- 1.50E+00	1.79E+00	3.87E-04 +/- 2.60E-05
m	8	117.25	2.40E+01 +/- 1.07E+00	1.78E+00	3.94E-04 +/- 2.52E-05
F	9	129.96	9.75E+01 +/- 2.17E+00	1.76E+00	4.29E-04 +/- 2.26E-05
	10	148.57	2.85E+01 +/- 1.09E+00	1.71E+00	4.62E-04 +/- 2.28E-05
	11	172.03	5.15E+00 +/- 1.22E+00	1.65E+00	4.80E-04 +/- 2.51E-05
	12	179.92	2.35E+00 +/- 1.12E+00	1.63E+00	4.81E-04 +/- 2.57E-05
	13	190.03	3.90E+00 +/- 1.06E+00	1.60E+00	4.81E-04 +/- 2.61E-05
	14	196.25	4.68E+00 +/- 1.05E+00	1.59E+00	4.79E-04 +/- 2.62E-05
	15	208.66	1.71E+02 +/- 2.75E+00	1.56E+00	4.74E-04 +/- 2.60E-05
	16	256.06	4.40E+00 +/- 8.52E-01	1.47E+00	4.39E-04 +/- 2.28E-05
M	17	264.82	1.45E+00 +/- 2.86E-01	1.45E+00	4.31E-04 +/- 2.20E-05
m	18	268.12	7.27E+00 +/- 6.21E-01	1.45E+00	4.28E-04 +/- 2.17E-05
M	19	298.14	1.45E+00 +/- 3.85E-01	1.42E+00	4.01E-04 +/- 1.90E-05
m	20	300.78	1.02E+00 +/- 3.13E-01	1.41E+00	3.98E-04 +/- 1.88E-05
	21	311.90	8.30E+00 +/- 6.19E-01	1.40E+00	3.88E-04 +/- 1.78E-05
	22	323.53	7.88E+00 +/- 7.36E-01	1.39E+00	3.78E-04 +/- 1.69E-05
M	23	333.28	3.60E+01 +/- 1.02E+00	1.38E+00	3.69E-04 +/- 1.62E-05
m	24	336.21	1.59E+01 +/- 5.76E-01	1.38E+00	3.67E-04 +/- 1.60E-05
	25	345.65	2.18E+01 +/- 6.83E-01	1.37E+00	3.59E-04 +/- 1.54E-05
	26	375.64	4.54E+01 +/- 1.34E+00	1.34E+00	3.34E-04 +/- 1.38E-05
M	27	380.77	1.09E+01 +/- 5.52E-01	1.34E+00	3.30E-04 +/- 1.36E-05
m	28	383.39	1.01E+01 +/- 4.97E-01	1.34E+00	3.28E-04 +/- 1.35E-05
	29	393.53	2.36E+01 +/- 7.16E-01	1.33E+00	3.21E-04 +/- 1.31E-05
	30	413.70	6.36E+01 +/- 1.18E+00	1.32E+00	3.06E-04 +/- 1.25E-05
	31	446.27	4.62E-01 +/- 2.94E-01	1.31E+00	2.85E-04 +/- 1.17E-05
	32	452.06	7.72E+00 +/- 3.68E-01	1.31E+00	2.82E-04 +/- 1.16E-05

	33	619.66	1.13E+00	+/-	1.67E-01	1.26E+00	2.06E-04	+/- 9.86E-06
	34	646.47	3.48E-01	+/-	1.06E-01	1.25E+00	1.98E-04	+/- 9.58E-06
	35	662.42	5.92E+00	+/-	2.82E-01	1.25E+00	1.93E-04	+/- 9.41E-06
	36	689.29	3.23E-01	+/-	1.13E-01	1.24E+00	1.86E-04	+/- 9.10E-06
M	37	718.34	8.57E-02	+/-	3.54E-02	1.24E+00	1.79E-04	+/- 8.76E-06
m	38	722.49	2.88E+00	+/-	1.90E-01	1.24E+00	1.78E-04	+/- 8.71E-06
	39	1275.36	9.67E-02	+/-	3.78E-02	1.17E+00	1.17E-04	+/- 5.24E-06
	40	2236.00	1.00E+02	+/-	1.59E+00	1.13E+00	1.19E-04	+/- 2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 102.47 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.160 +/- 0.0277
SE-75	264.65	0.000 +/- 0.0000	0.415 +/- 0.0188
SE-75	279.53	0.000 +/- 0.0000	0.459 +/- 0.0350
SE-75	400.65	0.000 +/- 0.0000	0.459 +/- 0.0491

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
	1	32.00	6.53E+00	+/-	5.40E-01	2.92E+00	6.07E-09	+/-	3.66E-08
	2	50.28	2.02E+01	+/-	1.62E+00	2.26E+00	3.23E-06	+/-	7.89E-06
	3	60.18	6.41E+02	+/-	8.40E+00	2.13E+00	1.65E-05	+/-	2.58E-05
	4	99.37	1.22E+02	+/-	2.72E+00	1.93E+00	2.36E-04	+/-	5.58E-05
	5	103.94	1.12E+02	+/-	2.43E+00	1.92E+00	2.69E-04	+/-	4.83E-05
	6	111.68	9.20E+00	+/-	1.70E+00	1.90E+00	3.22E-04	+/-	3.46E-05
M	7	115.20	9.39E+00	+/-	1.16E+00	1.89E+00	3.44E-04	+/-	2.92E-05
m	8	117.42	2.74E+00	+/-	6.81E-01	1.89E+00	3.58E-04	+/-	2.65E-05
M	9	125.99	2.16E+01	+/-	7.66E-01	1.87E+00	4.05E-04	+/-	2.41E-05
m	10	129.98	8.47E+01	+/-	1.86E+00	1.86E+00	4.24E-04	+/-	2.73E-05
	11	148.57	2.53E+01	+/-	1.00E+00	1.78E+00	4.88E-04	+/-	4.79E-05
	12	165.25	6.54E+00	+/-	8.30E-01	1.69E+00	5.16E-04	+/-	5.82E-05
	13	171.86	3.30E+00	+/-	1.09E+00	1.66E+00	5.22E-04	+/-	5.97E-05
	14	189.77	2.14E+00	+/-	7.99E-01	1.59E+00	5.23E-04	+/-	5.83E-05
	15	196.36	4.11E+00	+/-	9.68E-01	1.56E+00	5.20E-04	+/-	5.63E-05
	16	204.17	7.74E+00	+/-	1.15E+00	1.54E+00	5.14E-04	+/-	5.34E-05
	17	208.66	1.36E+02	+/-	2.41E+00	1.52E+00	5.11E-04	+/-	5.15E-05
	18	255.94	3.38E+00	+/-	5.99E-01	1.39E+00	4.54E-04	+/-	3.04E-05
M	19	264.41	7.60E-01	+/-	2.48E-01	1.37E+00	4.43E-04	+/-	2.73E-05
m	20	268.17	6.27E+00	+/-	5.82E-01	1.36E+00	4.38E-04	+/-	2.61E-05
M	21	298.10	1.67E+00	+/-	3.55E-01	1.32E+00	3.99E-04	+/-	1.92E-05
m	22	300.67	7.60E-01	+/-	2.31E-01	1.32E+00	3.96E-04	+/-	1.89E-05

m	23	303.70	6.19E-01	+/-	2.21E-01	1.32E+00	3.93E-04	+/-	1.85E-05
	24	311.90	7.07E+00	+/-	5.73E-01	1.32E+00	3.83E-04	+/-	1.78E-05
	25	323.42	6.93E+00	+/-	7.27E-01	1.32E+00	3.70E-04	+/-	1.72E-05
M	26	333.27	3.19E+01	+/-	9.45E-01	1.32E+00	3.59E-04	+/-	1.71E-05
m	27	336.22	1.33E+01	+/-	5.21E-01	1.32E+00	3.56E-04	+/-	1.71E-05
	28	345.65	1.99E+01	+/-	6.40E-01	1.32E+00	3.46E-04	+/-	1.72E-05
	29	375.67	4.18E+01	+/-	1.23E+00	1.32E+00	3.18E-04	+/-	1.78E-05
M	30	380.85	8.92E+00	+/-	4.92E-01	1.32E+00	3.14E-04	+/-	1.79E-05
m	31	383.39	9.38E+00	+/-	4.88E-01	1.32E+00	3.12E-04	+/-	1.80E-05
	32	393.48	2.09E+01	+/-	6.69E-01	1.32E+00	3.03E-04	+/-	1.81E-05
F	33	414.32	5.45E+01	+/-	1.29E+00	1.32E+00	2.88E-04	+/-	1.83E-05
	34	423.21	2.76E+00	+/-	2.93E-01	1.32E+00	2.82E-04	+/-	1.83E-05
	35	452.05	6.26E+00	+/-	3.63E-01	1.31E+00	2.63E-04	+/-	1.81E-05
	36	547.38	2.44E-01	+/-	8.83E-02	1.28E+00	2.18E-04	+/-	1.53E-05
	37	619.48	9.88E-01	+/-	1.40E-01	1.26E+00	1.95E-04	+/-	1.26E-05
	38	646.57	2.19E-01	+/-	1.10E-01	1.25E+00	1.88E-04	+/-	1.17E-05
	39	653.41	5.34E-01	+/-	1.66E-01	1.25E+00	1.86E-04	+/-	1.15E-05
	40	662.42	5.37E+00	+/-	2.61E-01	1.25E+00	1.84E-04	+/-	1.12E-05
	41	689.34	4.23E-01	+/-	1.11E-01	1.24E+00	1.78E-04	+/-	1.03E-05
	42	722.01	2.73E+00	+/-	1.89E-01	1.24E+00	1.72E-04	+/-	9.44E-06

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	738.14	1.73E-01 +/- 6.21E-02	1.23E+00	1.69E-04 +/- 9.05E-06
44	769.78	4.74E-01 +/- 9.41E-02	1.23E+00	1.63E-04 +/- 8.38E-06
45	964.13	2.93E-02 +/- 2.27E-02	1.20E+00	1.38E-04 +/- 6.28E-06
46	1001.03	4.72E-02 +/- 4.00E-02	1.20E+00	1.35E-04 +/- 6.06E-06
47	2236.00	1.00E+02 +/- 1.57E+00	1.13E+00	6.12E-05 +/- 3.31E-05

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 110.94 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.291 +/- 0.0182
SE-75	264.65	0.000 +/- 0.0000	0.457 +/- 0.0148
SE-75	279.53	0.000 +/- 0.0000	0.465 +/- 0.0249
SE-75	400.65	0.000 +/- 0.0000	0.521 +/- 0.0365

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.23	3.98E+00 +/- 3.81E-01	2.17E+00	1.71E-05 +/- 1.68E-05
	2	49.99	6.80E+00 +/- 1.16E+00	1.79E+00	8.39E-05 +/- 4.21E-05
	3	60.18	1.56E+02 +/- 2.43E+00	1.71E+00	1.37E-04 +/- 4.88E-05
	4	99.44	2.46E+01 +/- 1.22E+00	1.59E+00	3.30E-04 +/- 3.40E-05
	5	103.97	2.07E+01 +/- 1.06E+00	1.58E+00	3.47E-04 +/- 3.13E-05
	6	111.71	3.38E+00 +/- 9.29E-01	1.57E+00	3.72E-04 +/- 2.73E-05
	7	115.16	4.00E+00 +/- 9.83E-01	1.57E+00	3.82E-04 +/- 2.58E-05
M	8	126.00	5.10E+00 +/- 3.91E-01	1.55E+00	4.08E-04 +/- 2.27E-05
m	9	129.99	1.97E+01 +/- 8.29E-01	1.55E+00	4.16E-04 +/- 2.21E-05
	10	148.57	4.96E+00 +/- 6.21E-01	1.51E+00	4.43E-04 +/- 2.22E-05
	11	196.13	1.08E+00 +/- 7.41E-01	1.42E+00	4.59E-04 +/- 2.52E-05
	12	204.19	1.83E+00 +/- 4.40E-01	1.41E+00	4.57E-04 +/- 2.52E-05
	13	208.67	2.76E+01 +/- 8.95E-01	1.40E+00	4.56E-04 +/- 2.51E-05
	14	255.85	7.94E-01 +/- 3.69E-01	1.34E+00	4.29E-04 +/- 2.23E-05
	15	268.01	8.67E-01 +/- 4.04E-01	1.32E+00	4.20E-04 +/- 2.12E-05
	16	311.90	1.57E+00 +/- 3.42E-01	1.30E+00	3.87E-04 +/- 1.76E-05
	17	323.64	1.51E+00 +/- 3.99E-01	1.30E+00	3.78E-04 +/- 1.68E-05
M	18	333.35	6.09E+00 +/- 4.00E-01	1.29E+00	3.71E-04 +/- 1.62E-05
m	19	336.25	3.05E+00 +/- 2.59E-01	1.29E+00	3.68E-04 +/- 1.60E-05
	20	345.64	3.64E+00 +/- 2.92E-01	1.29E+00	3.62E-04 +/- 1.54E-05

	21	375.66	8.43E+00	+/-	5.10E-01	1.28E+00	3.40E-04	+/- 1.40E-05
M	22	380.81	1.57E+00	+/-	2.03E-01	1.28E+00	3.37E-04	+/- 1.38E-05
m	23	383.38	1.73E+00	+/-	2.09E-01	1.27E+00	3.35E-04	+/- 1.37E-05
	24	393.46	4.17E+00	+/-	3.04E-01	1.27E+00	3.28E-04	+/- 1.34E-05
F	25	414.34	1.14E+01	+/-	5.33E-01	1.26E+00	3.15E-04	+/- 1.28E-05
	26	423.29	7.38E-01	+/-	1.38E-01	1.26E+00	3.09E-04	+/- 1.27E-05
	27	452.09	1.34E+00	+/-	1.73E-01	1.25E+00	2.93E-04	+/- 1.22E-05
	28	511.00	4.93E-01	+/-	1.22E-01	1.24E+00	2.62E-04	+/- 1.16E-05
	29	619.12	1.65E-01	+/-	7.58E-02	1.21E+00	2.19E-04	+/- 1.08E-05
	30	653.09	2.64E-01	+/-	7.19E-02	1.21E+00	2.08E-04	+/- 1.04E-05
	31	662.42	1.16E+00	+/-	1.27E-01	1.21E+00	2.06E-04	+/- 1.03E-05
	32	722.01	4.38E-01	+/-	8.52E-02	1.20E+00	1.89E-04	+/- 9.55E-06
	33	2236.00	1.00E+02	+/-	1.52E+00	1.11E+00	9.04E-05	+/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 113.30 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.503 +/- 0.0196
SE-75	264.65	0.000 +/- 0.0000	0.560 +/- 0.0162
SE-75	279.53	0.000 +/- 0.0000	0.596 +/- 0.0248
SE-75	400.65	0.000 +/- 0.0000	0.579 +/- 0.0353

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.35	1.20E+00 +/- 2.35E-01	1.59E+00	1.30E-03 +/- 8.25E-03
2	60.14	3.50E+01 +/- 9.45E-01	1.37E+00	5.03E-04 +/- 8.48E-04
3	99.25	2.24E+00 +/- 6.49E-01	1.31E+00	4.09E-04 +/- 1.04E-04
4	129.29	1.41E+00 +/- 4.91E-01	1.29E+00	3.99E-04 +/- 2.58E-05
5	148.57	6.71E-01 +/- 3.77E-01	1.28E+00	3.97E-04 +/- 4.23E-05
6	208.74	5.04E-01 +/- 3.04E-01	1.25E+00	3.88E-04 +/- 4.33E-05
7	300.10	5.13E-01 +/- 2.63E-01	1.21E+00	3.57E-04 +/- 1.80E-05
8	345.49	3.54E-01 +/- 1.30E-01	1.22E+00	3.38E-04 +/- 1.65E-05
9	375.80	6.57E-01 +/- 1.54E-01	1.22E+00	3.25E-04 +/- 1.79E-05
10	393.68	1.91E-01 +/- 1.05E-01	1.22E+00	3.17E-04 +/- 1.87E-05
11	413.70	5.09E-01 +/- 8.55E-02	1.22E+00	3.08E-04 +/- 1.94E-05
12	511.33	1.64E-01 +/- 6.93E-02	1.20E+00	2.67E-04 +/- 1.91E-05
13	1085.91	4.58E-02 +/- 2.83E-02	1.13E+00	1.27E-04 +/- 5.57E-06
14	1112.12	4.36E-02 +/- 1.95E-02	1.13E+00	1.23E-04 +/- 5.40E-06
15	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.73 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.507 +/- 0.0178
SE-75	264.65	0.000 +/- 0.0000	0.607 +/- 0.0164
SE-75	279.53	0.000 +/- 0.0000	0.594 +/- 0.0233
SE-75	400.65	0.000 +/- 0.0000	0.593 +/- 0.0341

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.06	6.72E-01 +/- 1.61E-01	1.59E+00	2.40E-09 +/- 1.48E-08
2	49.54	1.10E+00 +/- 4.26E-01	1.40E+00	1.86E-06 +/- 4.82E-06
3	60.18	2.09E+01 +/- 7.22E-01	1.36E+00	1.30E-05 +/- 2.08E-05
4	95.37	1.07E+00 +/- 6.19E-01	1.31E+00	2.02E-04 +/- 6.09E-05
5	129.29	6.74E-01 +/- 3.63E-01	1.28E+00	4.34E-04 +/- 2.74E-05
6	185.71	5.39E-01 +/- 4.06E-01	1.24E+00	5.47E-04 +/- 6.36E-05
7	272.95	2.62E-01 +/- 1.56E-01	1.21E+00	4.41E-04 +/- 2.57E-05
8	413.70	2.82E-01 +/- 6.32E-02	1.21E+00	2.87E-04 +/- 1.84E-05
9	867.39	4.66E-02 +/- 3.06E-02	1.14E+00	1.48E-04 +/- 7.05E-06
10	1085.91	2.77E-02 +/- 2.58E-02	1.12E+00	1.28E-04 +/- 5.60E-06
11	2224.20	6.93E-02 +/- 2.45E-02	1.09E+00	6.54E-05 +/- 3.50E-05
12	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.87 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.379 +/- 0.0161
SE-75	264.65	0.000 +/- 0.0000	0.506 +/- 0.0148
SE-75	279.53	0.000 +/- 0.0000	0.530 +/- 0.0212
SE-75	400.65	0.000 +/- 0.0000	0.584 +/- 0.0333

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	60.20	1.94E+01 +/- 6.76E-01	1.54E+00	2.30E-05 +/- 3.89E-05
2	129.29	5.16E-01 +/- 3.02E-01	1.42E+00	4.16E-04 +/- 2.70E-05
3	208.85	3.97E-01 +/- 2.05E-01	1.33E+00	4.87E-04 +/- 5.33E-05
4	375.69	1.56E-01 +/- 6.41E-02	1.23E+00	3.16E-04 +/- 1.85E-05
5	413.70	1.59E-01 +/- 5.25E-02	1.21E+00	2.89E-04 +/- 1.94E-05
6	816.56	5.31E-02 +/- 2.79E-02	1.15E+00	1.64E-04 +/- 7.91E-06
7	1334.00	7.96E-02 +/- 3.14E-02	1.11E+00	1.11E-04 +/- 5.82E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.09E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 113.99 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.395 +/- 0.0150
SE-75	264.65	0.000 +/- 0.0000	0.498 +/- 0.0145
SE-75	279.53	0.000 +/- 0.0000	0.512 +/- 0.0202
SE-75	400.65	0.000 +/- 0.0000	0.533 +/- 0.0314

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.83	4.33E-01 +/- 1.33E-01	1.85E+00	3.32E-06 +/- 2.02E-05
2	49.64	1.01E+00 +/- 3.91E-01	1.57E+00	4.47E-05 +/- 1.13E-04
3	60.22	1.85E+01 +/- 6.22E-01	1.51E+00	9.62E-05 +/- 1.50E-04
4	99.37	1.04E+00 +/- 2.91E-01	1.43E+00	3.19E-04 +/- 7.53E-05
5	104.01	1.20E+00 +/- 3.24E-01	1.42E+00	3.39E-04 +/- 6.05E-05
6	129.29	7.37E-01 +/- 2.73E-01	1.40E+00	4.20E-04 +/- 2.62E-05
7	148.57	5.36E-01 +/- 3.26E-01	1.38E+00	4.51E-04 +/- 4.47E-05
8	185.71	3.48E-01 +/- 2.20E-01	1.35E+00	4.64E-04 +/- 5.33E-05
9	413.70	1.37E-01 +/- 5.33E-02	1.25E+00	2.98E-04 +/- 1.80E-05
10	512.53	1.06E-01 +/- 5.35E-02	1.23E+00	2.47E-04 +/- 1.68E-05
11	535.83	7.09E-02 +/- 3.04E-02	1.22E+00	2.37E-04 +/- 1.61E-05
12	1112.12	3.46E-02 +/- 1.73E-02	1.15E+00	1.26E-04 +/- 5.44E-06
13	1174.30	8.57E-02 +/- 3.31E-02	1.14E+00	1.21E-04 +/- 5.15E-06

14	2236.00	1.00E+02 +/-	1.50E+00	1.11E+00	7.64E-05 +/-	4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.13 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.625 +/- 0.0193
SE-75	264.65	0.000 +/- 0.0000	0.740 +/- 0.0186
SE-75	279.53	0.000 +/- 0.0000	0.715 +/- 0.0248
SE-75	400.65	0.000 +/- 0.0000	0.801 +/- 0.0396

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.09	1.78E-01 +/- 9.96E-02	1.39E+00	1.22E-09 +/- 7.68E-09
2	60.23	9.38E+00 +/- 4.61E-01	1.24E+00	1.24E-05 +/- 2.04E-05
3	129.29	6.90E-01 +/- 3.09E-01	1.19E+00	4.21E-04 +/- 2.67E-05
4	148.57	5.48E-01 +/- 2.86E-01	1.18E+00	4.82E-04 +/- 5.01E-05
5	722.01	5.18E-02 +/- 2.11E-02	1.06E+00	1.64E-04 +/- 9.17E-06
6	964.13	2.32E-02 +/- 2.14E-02	1.05E+00	1.33E-04 +/- 6.09E-06
7	1332.93	8.07E-02 +/- 4.00E-02	1.05E+00	9.75E-05 +/- 5.40E-06
8	2236.00	1.00E+02 +/- 1.49E+00	1.04E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.19 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.524 +/- 0.0177
SE-75	264.65	0.000 +/- 0.0000	0.556 +/- 0.0154
SE-75	279.53	0.000 +/- 0.0000	0.580 +/- 0.0218
SE-75	400.65	0.000 +/- 0.0000	0.620 +/- 0.0335

P E A K A N A L Y S I S R E S U L T S

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.64	4.04E-01 +/- 1.03E-01	1.57E+00	3.76E-06 +/- 4.59E-06
2	60.22	1.26E+00 +/- 2.64E-01	1.34E+00	5.64E-05 +/- 2.42E-05
3	413.70	6.69E-02 +/- 4.53E-02	1.19E+00	1.79E-04 +/- 8.85E-06
4	964.13	6.91E-02 +/- 2.44E-02	1.12E+00	8.21E-05 +/- 4.35E-06
5	1085.91	8.63E-03 +/- 8.63E-03	1.11E+00	7.51E-05 +/- 3.53E-06
6	1408.01	8.63E-03 +/- 8.63E-03	1.10E+00	6.48E-05 +/- 4.76E-06
7	2236.00	1.00E+02 +/- 1.49E+00	1.08E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: LL85101018
Peak Locate Performed on: 9-06-07 5:23:20 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.78	0.1348	32.06	23.60
2	100.72	0.1540	50.03	13.68
3	121.03	0.0366	60.18	325.32
4	199.43	0.0607	99.38	109.75
5	208.58	0.0654	103.96	91.64
6	224.04	0.0891	111.72	55.11
7	230.86	0.1159	115.11	32.82
8	236.31	0.1992	117.47	11.22
9	260.66	0.0608	129.98	112.53
10	299.13	0.0940	149.23	51.06
11	331.22	0.1373	165.28	23.82
12	344.82	0.2330	172.08	8.41
13	380.28	0.2438	189.80	7.55
14	393.30	0.2052	196.31	9.97
15	417.99	0.0497	208.66	168.21
16	512.61	0.1823	255.97	11.68
17	537.01	0.1392	268.17	22.15
18	596.81	0.2508	298.07	7.46
19	625.59	0.1148	312.46	29.05
20	648.03	0.1917	323.68	8.63
21	667.08	0.0814	333.30	63.56
22	673.58	0.1276	336.23	29.20
23	691.97	0.0843	345.65	58.12
24	738.67	0.1243	369.00	23.64
25	752.00	0.0636	375.66	99.83
26	761.97	0.1140	380.81	34.76
27	767.78	0.1270	383.39	28.26
28	787.68	0.0825	393.50	53.17
29	829.32	0.0617	414.32	94.93
30	847.12	0.1252	423.23	25.37
31	904.77	0.1062	452.05	33.06
32	1023.76	0.2140	511.55	5.08
33	1118.98	0.2744	559.16	5.09
34	1239.66	0.1821	619.50	10.56
35	1293.63	0.2277	646.48	6.69
36	1307.04	0.2061	653.18	6.88

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	1326.58	0.1115	662.96	27.02
38	1379.15	0.2268	689.24	7.07
39	1445.66	0.1335	722.50	19.30
40	2348.70	0.2359	1174.01	5.27
41	2666.93	0.2096	1333.13	6.81
42	4449.87	0.2208	2224.60	5.29
43	4471.80	0.0267	2235.57	402.90

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: LL85101018
Peak Analysis Performed on: 9-06-07 5:23:20 PM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	61-	71	64.78	32.06	4.40E+03	143.08	5.81E+03
	2	94-	105	100.72	50.03	8.88E+03	360.24	4.60E+04
	3	114-	127	121.03	60.18	2.12E+05	593.06	5.06E+04
	4	194-	202	199.43	99.38	3.66E+04	439.19	7.35E+04
	5	206-	215	208.58	103.96	3.22E+04	390.00	4.72E+04
M	6	217-	243	224.10	111.72	1.81E+04	259.00	3.78E+04
m	7	217-	243	230.88	115.11	1.74E+04	255.54	3.97E+04
m	8	217-	243	235.60	117.47	1.08E+04	203.73	3.90E+04
F	9	257-	267	260.63	129.98	2.74E+04	329.87	1.56E+04
	10	297-	306	299.13	149.23	7.08E+03	227.65	1.93E+04
	11	327-	338	331.22	165.28	7.86E+02	239.04	2.24E+04
	12	338-	349	344.82	172.08	1.35E+03	224.17	1.95E+04
	13	376-	387	380.28	189.80	9.23E+02	212.77	1.77E+04
	14	391-	400	393.30	196.31	1.20E+03	178.73	1.35E+04
	15	413-	425	417.99	208.66	4.27E+04	304.82	1.89E+04
	16	505-	519	512.61	255.97	1.11E+03	162.03	8.73E+03
	17	534-	544	537.01	268.17	1.39E+03	126.25	6.02E+03
	18	592-	604	596.81	298.07	6.85E+02	125.49	5.73E+03
	19	622-	630	625.59	312.46	2.15E+03	100.16	3.66E+03
	20	640-	655	648.03	323.68	2.10E+03	140.72	5.87E+03
M	21	659-	678	667.26	333.30	9.37E+03	153.98	3.46E+03
m	22	659-	678	673.12	336.23	4.12E+03	91.20	3.32E+03
	23	691-	699	691.97	345.65	5.77E+03	110.01	2.60E+03
	24	731-	746	738.67	369.00	3.21E+02	151.31	6.93E+03
	25	746-	759	752.00	375.66	1.22E+04	199.71	9.27E+03
M	26	759-	775	762.29	380.81	2.73E+03	85.97	2.17E+03
m	27	759-	775	767.45	383.39	2.72E+03	81.99	1.87E+03
	28	779-	795	787.68	393.50	6.16E+03	114.55	2.23E+03
	29	821-	837	829.32	414.32	1.62E+04	146.78	1.70E+03
	30	843-	851	847.12	423.23	8.44E+02	55.68	1.05E+03
	31	901-	912	904.77	452.05	1.96E+03	59.87	6.25E+02
	32	1015-	1031	1023.76	511.55	4.96E+02	46.07	5.20E+02
	33	1114-	1125	1118.98	559.16	7.34E+01	27.06	2.62E+02
	34	1231-	1247	1239.66	619.50	2.82E+02	32.60	2.50E+02
	35	1289-	1298	1293.63	646.48	7.58E+01	22.20	1.82E+02
	36	1298-	1315	1307.04	653.18	7.40E+01	39.18	4.45E+02
	37	1318-	1334	1326.58	662.96	1.55E+03	47.68	2.31E+02

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
38	1370-	1385	1379.15	689.24	1.02E+02	26.28	1.96E+02
39	1441-	1454	1445.66	722.50	7.35E+02	35.14	1.78E+02
40	2339-	2357	2348.70	1174.01	1.16E+02	18.24	6.42E+01
41	2663-	2676	2666.93	1333.13	1.09E+02	15.72	4.76E+01
42	4443-	4457	4449.87	2224.60	7.77E+01	10.79	1.33E+01
43	4461-	4482	4471.80	2235.57	1.81E+05	426.36	2.34E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: LL85101018
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.987	2236.00*	100.00	7.423E+02	1.955E+02
Np-237	0.744	300.10	6.63		
		311.90*	38.60	5.007E+00	2.376E-01
Pu-239	0.973	413.70*	0.00	1.205E+06	2.551E+04
Pu-239A	0.967	129.29*	0.01	3.989E+05	1.164E+04
Am-241	0.980	662.42*	0.00	6.321E+05	2.056E+04
Am-241D	0.983	722.01*	0.00	6.554E+05	3.213E+04
Pu-241	0.969	148.57*	0.00	3.101E+06	1.217E+05

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 9-06-07 5:23:20 PM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
	1	32.06	3.9099E+01	3.26
	2	50.03	7.8843E+01	4.06
	3	60.18	1.8807E+03	0.38
	4	99.38	3.2500E+02	1.23
	5	103.96	2.8583E+02	1.24
M	6	111.72	1.6065E+02	1.45
m	7	115.11	1.5416E+02	1.49
m	8	117.47	9.6028E+01	1.90
	11	165.28	6.9764E+00	30.42
	12	172.08	1.1958E+01	16.64
	13	189.80	8.1935E+00	23.05
	14	196.31	1.0646E+01	14.91
	15	208.66	3.7948E+02	0.76
	16	255.97	9.8957E+00	14.54
	17	268.17	1.2352E+01	9.08
	18	298.07	6.0773E+00	18.33
	20	323.68	1.8673E+01	6.69
M	21	333.30	8.3180E+01	1.66
m	22	336.23	3.6614E+01	2.23
	23	345.65	5.1205E+01	1.92
	24	369.00	2.8514E+00	47.11
	25	375.66	1.0813E+02	1.66
M	26	380.81	2.4242E+01	3.16
m	27	383.39	2.4116E+01	3.03
	28	393.50	5.4638E+01	1.88
	30	423.23	7.4954E+00	6.60
	31	452.05	1.7367E+01	3.07
	32	511.55	4.4062E+00	9.28
	33	559.16	6.5163E-01	36.86
	34	619.50	2.5057E+00	11.55
	35	646.48	6.7282E-01	29.29
	36	653.18	6.5706E-01	52.93
	38	689.24	9.0679E-01	25.72
	40	1174.01	1.0281E+00	15.75
	41	1333.13	9.7114E-01	14.37
	42	2224.60	6.8992E-01	13.88

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.02E+02	+/-	1.17E+02		3.11E-02	+/-	4.55E-03
SE-75	<	3.22E-01	+/-	1.65E-02	<	1.25E-05	+/-	6.39E-07
EU-152x	<	2.18E-01	+/-	1.44E-02	<	8.46E-06	+/-	5.58E-07
U-233	<	1.62E+04	+/-	8.42E+02	<	6.26E-01	+/-	3.27E-02
U-235		1.06E-01	+/-	5.38E-02		4.10E-06	+/-	2.09E-06
Np-237		4.47E+00	+/-	2.54E-01		1.73E-04	+/-	9.83E-06
Pu-238		9.66E+03	+/-	3.80E+03		3.74E-01	+/-	1.47E-01
U-238		4.05E+00	+/-	1.59E+00		1.57E-04	+/-	6.16E-05
Pu-239		1.23E+06	+/-	4.17E+04		4.79E+01	+/-	1.62E+00
Pu-239A		4.49E+05	+/-	1.59E+04		1.74E+01	+/-	6.16E-01
Am-241		6.43E+05	+/-	2.80E+04		2.49E+01	+/-	1.09E+00
Am-241D		6.88E+05	+/-	3.60E+04		2.67E+01	+/-	1.39E+00
Pu-241		3.65E+06	+/-	1.89E+05		1.42E+02	+/-	7.34E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-235	4.90E-02	+/-	2.49E-02
Np-237	6.35E-03	+/-	3.60E-04
Pu-238	5.64E-04	+/-	2.22E-04
U-238	1.21E+01	+/-	4.74E+00
Pu-239	1.99E+01	+/-	6.72E-01
Pu-239A	7.23E+00	+/-	2.56E-01
Am-241	1.88E-01	+/-	8.19E-03
Pu-241	3.53E-02	+/-	1.83E-03

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.42E+02	+/-	1.95E+02		2.88E-02	+/-	7.58E-03
SE-75	<	8.01E-01	+/-	8.55E-03	<	3.11E-05	+/-	3.31E-07
EU-152x	<	6.21E-01	+/-	1.27E-02	<	2.41E-05	+/-	4.90E-07
U-233	<	4.45E+04	+/-	1.09E+03	<	1.73E+00	+/-	4.21E-02
U-235	<	1.16E+00	+/-	2.92E-02	<	4.49E-05	+/-	1.13E-06
Np-237		5.01E+00	+/-	2.38E-01		1.94E-04	+/-	9.21E-06
Pu-238	<	8.89E+04	+/-	1.99E+03	<	3.45E+00	+/-	7.73E-02
U-238	<	1.67E+01	+/-	2.72E-01	<	6.46E-04	+/-	1.05E-05
Pu-239		1.20E+06	+/-	2.55E+04		4.67E+01	+/-	9.89E-01
Pu-239A		3.99E+05	+/-	1.16E+04		1.55E+01	+/-	4.51E-01
Am-241		6.32E+05	+/-	2.06E+04		2.45E+01	+/-	7.97E-01
Am-241D		6.55E+05	+/-	3.21E+04		2.54E+01	+/-	1.25E+00
Pu-241		3.10E+06	+/-	1.22E+05		1.20E+02	+/-	4.72E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	7.11E-03	+/-	3.37E-04
Pu-239	1.94E+01	+/-	4.11E-01
Pu-239A	6.42E+00	+/-	1.87E-01
Am-241	1.85E-01	+/-	6.00E-03
Pu-241	3.00E-02	+/-	1.18E-03

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.963	+/-	6.9465
Matrix Longitudinal Ratio:	0.768	+/-	1.0805
Source Vertical Ratio:	0.803	+/-	0.4083
Matrix Vertical Ratio:	0.676	+/-	0.0866

NUDS could not find the transmission peak in one radial segment.

Radioassay Data Sheet — Thu Aug 23 11:05:08 2007

Procedure ID & Rev: WCP-55 03/07/2002 — Software Version: GWAS v2.3bGEN

Drum ID	: S100-2388	Gross Weight (kg)	: 54.0
Sequence Number	: 2388	Fill Height (%)	: 100.0
Assay Date	: 08/23/07 10:02:31	Density (g/cc)	: 0.11
		Net Weight (kg)	: 22.20
Batch Number	:	Waste Matrix Code	:
Site ID	:	TRUCON	:

	Errors at 1.00 Sigma			
TRU Alpha Activity Concentration:	4.47e-04	+/-	5.50e-05	Ci/g
Total Pu-239 Equiv Activity:	1.03e+01	+/-	1.22e+00	Ci
Total Pu-239 Fissile Gram Equiv:	1.11e+02	+/-	1.88e+01	g
Decay Heat:	3.17e-01	+/-	3.85e-02	W
Total Pu Mass:	1.17e+02	+/-	1.89e+01	g
TMU:	17.12%			
Waste Classification:	TRU			

Isotopics Data

Measured Isotope	MGA Report Weight %	MGA Report % Err (1.00 Sigma)
Pu-238	9.02e-03	6.11e+00
Pu-239	9.42e+01	4.71e-02
Pu-240	5.57e+00	7.90e-01
Pu-241	1.84e-01	6.17e-01
Pu-242	3.06e-02	1.00e+01
Am-241	4.89e-01	4.38e-01
Am-243	0.00e+00	0.00e+00
Np-237	0.00e+00	0.00e+00
U-235	0.00e+00	0.00e+00

Activity Errors

Isotope	Isotope Mass (g)	1.00 Sigma Error/Isotope Mass (g)	Alpha Activity/ Isotope (Ci)	1.00 Sigma Error/Isotope (Ci)	MDA (g)
Pu-238	1.05e-02	1.92e-03	1.81e-01	3.28e-02	3.05e-03
Pu-239	1.10e+02	1.88e+01	6.83e+00	1.17e+00	3.32e-01
Pu-240	6.51e+00	1.12e+00	1.48e+00	2.53e-01	0.00e+00
Pu-241	2.15e-01	3.67e-02	2.22e+01	3.80e+00	6.02e-03
Pu-242	3.58e-02	7.09e-03	1.40e-04	2.78e-05	0.00e+00
Am-241	4.22e-01	7.08e-02	1.44e+00	2.42e-01	5.96e-03
Am-243	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
Np-237	1.18e-02	2.05e-03	8.29e-06	1.45e-06	1.42e-03
*U-235	<LLD	0.00e+00	0.00e+00	0.00e+00	3.33e-01
*U-238	<LLD	0.00e+00	0.00e+00	0.00e+00	1.98e+01
*U-233	<LLD	0.00e+00	0.00e+00	0.00e+00	3.20e+00
CS-137	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
U-234	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
SR-90	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00

* = Activity/Mass below detectable limit.

Operator Signature — Date

Reviewer Signature — Date

AUTOMATED INDEPENDENT TECHNICAL REVIEW BASED ON WCP-55 03/07/2002

Software Version: GWAS v2.3bGEN
Counter Number: SGS
Data Review for Container: S100-2388
Item Description Code: \Count Type: DEBRIS
Sequence Number: 2388
Assayed on: 08/23/07 10:02:31
Report Generated: 08/23/07 11:04:53
AITR Version 1.4

Section 1 MGA Analysis Review Using MGA Isotopics

REVIEW Pu-240 Wt Pct +2 Sigma error <5.66> less than <5.87> Review MGA Resu
Pu-240 Wt Pct error <0.79> is within limits
Pu-238 Wt Pct error <6.11> is within limits
REVIEW QFIT <1.29> > <1.20> Review MGA Results
REVIEW MGAERR12: Calculations in MGAABS didn't converge: MGA results may be suspect

---

Section 2 - CONTAINER DENSITY REVIEW

Container density <0.107> g/cc is within UPPER and LOWER limits

---

Section 3 - SELF-ABSORPTION REVIEW

Pu-239/Pu-239a ratio <1.61e+00> is within limits

Section 4 - PULSER REVIEW

DEAD TIME percentage <1.55> is acceptable in Segment 1
Pulser value <0.99> is within range in Segment 1
DEAD TIME percentage <1.88> is acceptable in Segment 2
Pulser value <0.99> is within range in Segment 2
DEAD TIME percentage <4.22> is acceptable in Segment 3
Pulser value <0.99> is within range in Segment 3
DEAD TIME percentage <14.50> is acceptable in Segment 4
Pulser value <1.00> is within range in Segment 4
DEAD TIME percentage <27.01> is acceptable in Segment 5
Pulser value <0.98> is within range in Segment 5
DEAD TIME percentage <27.10> is acceptable in Segment 6
REVIEW Pulser value <0.97> out of range in Segment 6
DEAD TIME percentage <17.09> is acceptable in Segment 7
Pulser value <0.99> is within range in Segment 7
DEAD TIME percentage <6.23> is acceptable in Segment 8
Pulser value <1.00> is within range in Segment 8
DEAD TIME percentage <2.08> is acceptable in Segment 9
Pulser value <0.99> is within range in Segment 9
DEAD TIME percentage <1.52> is acceptable in Segment 10
Pulser value <0.99> is within range in Segment 10
DEAD TIME percentage <1.25> is acceptable in Segment 11
Pulser value <0.99> is within range in Segment 11
DEAD TIME percentage <1.10> is acceptable in Segment 12
Pulser value <0.99> is within range in Segment 12
DEAD TIME percentage <0.90> is acceptable in Segment 13
Pulser value <0.99> is within range in Segment 13
DEAD TIME percentage <0.77> is acceptable in Segment 14
Pulser value <0.99> is within range in Segment 14
DEAD TIME percentage <0.71> is acceptable in Segment 15
Pulser value <0.99> is within range in Segment 15

```
            DEAD TIME percentage <0.70> is acceptable in Segment 16
            Pulser value <0.99> is within range in Segment 16
```

```
Section 5 - TRANSMISSION REVIEW

            Transmission results are acceptable in Segment 1
            Transmission results are acceptable in Segment 2
            Transmission results are acceptable in Segment 3
            Transmission results are acceptable in Segment 4
REVIEW      Fiducial Transmission Line <400.645996> < <0.01> found in Segment 5
REVIEW      Fiducial Transmission Line <400.645996> < <0.01> found in Segment 6
REVIEW      Low Transmission Line <136.000000> < <0.001> found in Segment 7
            Transmission results are acceptable in Segment 8
            Transmission results are acceptable in Segment 9
            Transmission results are acceptable in Segment 10
            Transmission results are acceptable in Segment 11
            Transmission results are acceptable in Segment 12
            Transmission results are acceptable in Segment 13
            Transmission results are acceptable in Segment 14
            Transmission results are acceptable in Segment 15
            Transmission results are acceptable in Segment 16
```

```
Section 6 - REDUCED CHI SQUARED FIT REVIEW

REVIEW      Reduced chi squared fit value <6.70e+00> exceeds
            limit <3.00> for energy peak <129.98> in Segment 4
REVIEW      Reduced chi squared fit value <2.00e+01> exceeds
            limit <3.00> for energy peak <129.94> in Segment 5
REVIEW      Reduced chi squared fit value <1.44e+01> exceeds
            limit <3.00> for energy peak <129.94> in Segment 6
REVIEW      Reduced chi squared fit value <7.12e+00> exceeds
            limit <3.00> for energy peak <129.97> in Segment 7
```

```
Section 7 - FGE MASS REVIEW

REVIEW      FGE Mass <129.59> > <110.00>
```

```
Section 8 - PERCENT FULL REVIEW

            Percent Full <100.0> is above lower limit <30.0>
```

```
Section 9 - IDC COUNT TYPE REVIEW

REVIEW      IDC is not available
```

```
Section 10 - AM-241 & NP-237 INTERFERENCE REVIEW

            Am-241 ratio <260.96> is above lower limit <200.00>
            Np-237 ratio <9360.57> is above lower limit <125.00>
```

```
Section 11 - PU-239 CALIBRATION RANGE REVIEW

            Pu-239 <110.10> is within limits
```

```
Section 12 - CS-137 INTERFERENCE REVIEW

            Am-241D > Am-241A: Calculation not performed
```

Independent Reviewer:_____Date:_____

INDEPENDENT TECHNICAL REVIEW COMMENT SHEET

Counter Number: SGS
Data Review for Container: S100-2388
Item Description Code:
Sequence Number: 2388
Assayed on: 08/23/07 10:02:31
AITR Version 1.4

Comments	Disposition
SECTION 1 - MGA Pu-240 Wt Pct +2 Sigma error is less than lower limit. QFIT is greater than upper limit. MGAERR12	
SECTION 4 - PULSER Pulser value out of range in Segment 6	
SECTION 5 - TRANSMISSION Low Transmission Line 136.0 less than 0.001 found in Segment 7 Fiducial Transmission Line less than 0.01 found in Segment 5 Fiducial Transmission Line less than 0.01 found in Segment 6	
SECTION 6 - REDUCED CHI SQUARED FIT Chi square failure for 130.0 Kev in Segment 4 Chi square failure for 129.9 Kev in Segment 5 Chi square failure for 129.9 Kev in Segment 6 Chi square failure for 130.0 Kev in Segment 7	
SECTION 7 - FGE MASS FGE Mass is greater than upper limit.	
SECTION 9 - IDC COUNT TYPE IDC is not available.	

Technical Reviewer:_____Date:_____

```
***********************************************************************
*****                        M G A   R E P O R T                  *****
***********************************************************************
```

Report generated on: 8-23-07 10:59:02 AM

MGA version: MGA V9.5 CI

Spectrum ID: 11202388.CNF Sens : 30.0% LT: 46.5 Mins DT: 16.76
Measurement date: 8-23-07 Declared date: 8-23-07

Sample ID: S100-2388 Detector: Total counts: 1.301E+07

Pu g/cm2 = 0.8165 Cd g/cm2 = 1.7949 FWHM at 122 keV = 613 eV
QFIT = 1.29 FWHM at 208 keV = 783 eV
NQFIT = 1.01

Isotope	Relative to Pu-239	%* Err	% Err	Relative to Pu-241	%* Err	Isotope analysis at Meas. date % weight	%Err	Decl. date % weight	%Err
Pu-238	0.000096	6.1	6.1	0.0492	6.1	0.00902	6.11	0.00902	6.11
Pu-239	1.000000	0.0	0.4	513.2195	0.6	94.20804	0.05	94.20804	0.05
Pu-240	0.059111	0.8	0.8	30.3371	0.9	5.56876	0.79	5.56876	0.79
Pu-241	0.001948	0.6	0.5	1.0000	0.0	0.18356	0.62	0.18356	0.62
Pu-242	(New alg.	)		0.1668	(10)	0.03061	(10)	0.03061	(10)
Am-241	0.005190	0.5	0.3	2.6638	0.6	0.48898	0.44	0.48898	0.44

Pu-240 effective (meas. date) = 5.643 +/- 0.86%
Am-241 separated about 26.908 +/- 0.145 years ago
Am/Pu-241 weight ratio = 2.66385 +/- 0.63%

Messages :

Lead x-rays detected.
Calculations in MGAABS didn't converge : results may be suspect.
Pu-241/Pu-239 efficiency changed in MGACAL by 1%.
17 MGA parameter(s) defaulted, starting from parameter 8.

Notes : * = Error in ratio
1.000 sigma errors

Gamma Waste Assay

Sample Information

File Name: C:\WAS\DATA\2400\11102388.S11
Sample ID: S100-2388 Count Sequence Number: 2388
Assay Start: 8-23-07 10:02:32 AM
Description 1:
Description 2:
Location:
Comment:
Waste Type:
Weight: Gross: 54000.0 g Net: 22200.0 g
Density: 0.107 g /ml

Container Type: 55 Gal Galv
Container: Volume: 208000. ml Full: 100.0 %

System Configuration

Counter ID Number: SGS
Arrangement Description: SGS
Segments: Number: 16 Offset: 0
Scanning Platform: Start: 934 mm Delta: -51 mm
Count Type: Daily 100g Drum Check
Collimator/Geometry Setting: 0
Transmission Mode: Two pass
Transmission Source: 0

Errors quoted at 1.000 sigma
Reference Source Date: Reference Source Rate: 1.00E+02 cps
Geometric Correction Factor(SWCONTGCF): 0.760
Date of efficiency calibration approval: 8-27-2003 2:05:34 PM
Mu Factors response file: Lucite
Transmission Calib. Time: 5-21-2007 4:21:04 PM 70097

Reviewed by: _____ Date: _____

Segment Results

Segment: 1 Detector: DET01 (# 1) Position: 1

Elapsed Live Time: 113.22 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.394 +/- 0.0186
SE-75	264.65	0.000 +/- 0.0000	0.520 +/- 0.0156
SE-75	279.53	0.000 +/- 0.0000	0.508 +/- 0.0224
SE-75	400.65	0.000 +/- 0.0000	0.535 +/- 0.0316

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.03	8.29E-01 +/- 1.75E-01	1.85E+00	4.63E-10 +/- 3.29E-09
2	48.98	3.36E+00 +/- 5.32E-01	1.58E+00	6.44E-07 +/- 1.97E-06
3	59.96	6.80E+00 +/- 5.66E-01	1.52E+00	6.14E-06 +/- 1.14E-05
4	300.10	5.97E-01 +/- 3.28E-01	1.27E+00	2.87E-04 +/- 1.52E-05
5	512.24	2.25E-01 +/- 6.50E-02	1.23E+00	1.61E-04 +/- 1.31E-05
6	722.01	4.75E-02 +/- 3.04E-02	1.19E+00	1.18E-04 +/- 7.51E-06
7	1112.12	1.75E-02 +/- 1.24E-02	1.15E+00	8.48E-05 +/- 4.39E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.10E+00	3.40E-05 +/- 2.15E-05

Segment: 2 Detector: DET01 (# 1) Position: 2

Elapsed Live Time: 112.84 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.452 +/- 0.0216
SE-75	264.65	0.000 +/- 0.0000	0.618 +/- 0.0177
SE-75	279.53	0.000 +/- 0.0000	0.653 +/- 0.0276
SE-75	400.65	0.000 +/- 0.0000	0.705 +/- 0.0392

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.10	1.07E+00 +/- 1.95E-01	1.70E+00	1.89E-05 +/- 1.17E-04
2	49.01	3.48E+00 +/- 5.87E-01	1.48E+00	7.88E-05 +/- 2.11E-04
3	60.05	1.76E+01 +/- 7.05E-01	1.43E+00	1.32E-04 +/- 2.14E-04
4	99.62	3.16E+00 +/- 1.02E+00	1.36E+00	3.10E-04 +/- 7.42E-05
5	400.66	1.88E-01 +/- 1.19E-01	1.14E+00	2.97E-04 +/- 1.83E-05
6	443.98	8.26E-02 +/- 5.56E-02	1.13E+00	2.72E-04 +/- 1.86E-05
7	867.39	3.95E-02 +/- 2.91E-02	1.09E+00	1.44E-04 +/- 6.91E-06
8	964.13	2.41E-02 +/- 2.14E-02	1.09E+00	1.32E-04 +/- 6.07E-06
9	1333.72	7.07E-02 +/- 3.42E-02	1.07E+00	1.05E-04 +/- 5.55E-06
10	2236.00	1.00E+02 +/- 1.50E+00	1.06E+00	9.73E-05 +/- 5.41E-05

Segment: 3 Detector: DET01 (# 1) Position: 3

Elapsed Live Time: 110.15 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.416 +/- 0.0243
SE-75	264.65	0.000 +/- 0.0000	0.584 +/- 0.0184
SE-75	279.53	0.000 +/- 0.0000	0.521 +/- 0.0315
SE-75	400.65	0.000 +/- 0.0000	0.622 +/- 0.0417

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.01	5.31E+00 +/- 4.41E-01	1.79E+00	3.42E-06 +/- 3.28E-06
	2	60.18	7.26E+01 +/- 1.47E+00	1.48E+00	8.08E-05 +/- 2.79E-05
	3	67.69	1.22E+00 +/- 6.27E-01	1.46E+00	1.19E-04 +/- 3.23E-05
	4	99.40	2.87E+01 +/- 1.45E+00	1.40E+00	2.97E-04 +/- 3.03E-05
	5	111.71	7.61E+00 +/- 1.08E+00	1.39E+00	3.54E-04 +/- 2.60E-05
M	6	126.02	3.53E+00 +/- 3.85E-01	1.38E+00	4.08E-04 +/- 2.26E-05
m	7	130.04	2.52E+01 +/- 9.72E-01	1.37E+00	4.20E-04 +/- 2.22E-05
	8	148.57	2.66E+00 +/- 8.07E-01	1.35E+00	4.63E-04 +/- 2.25E-05
	9	165.36	1.11E+00 +/- 6.20E-01	1.33E+00	4.85E-04 +/- 2.42E-05
	10	171.72	1.15E+00 +/- 7.47E-01	1.32E+00	4.90E-04 +/- 2.48E-05
	11	196.16	1.33E+00 +/- 6.77E-01	1.29E+00	4.95E-04 +/- 2.60E-05

	12	208.68	1.52E+01	+/-	8.44E-01	1.27E+00	4.92E-04	+/- 2.59E-05
	13	255.99	5.84E-01	+/-	3.14E-01	1.23E+00	4.58E-04	+/- 2.28E-05
M	14	263.93	3.49E-01	+/-	1.40E-01	1.22E+00	4.51E-04	+/- 2.21E-05
m	15	267.97	4.67E-01	+/-	1.57E-01	1.23E+00	4.47E-04	+/- 2.17E-05
	16	324.19	6.67E-01	+/-	4.74E-01	1.24E+00	3.93E-04	+/- 1.70E-05
M	17	333.38	5.86E+00	+/-	4.63E-01	1.23E+00	3.84E-04	+/- 1.63E-05
m	18	336.36	1.72E+00	+/-	2.33E-01	1.23E+00	3.81E-04	+/- 1.61E-05
	19	345.67	5.46E+00	+/-	4.40E-01	1.22E+00	3.73E-04	+/- 1.56E-05
	20	375.68	1.19E+01	+/-	5.95E-01	1.20E+00	3.46E-04	+/- 1.41E-05
M	21	380.90	2.43E+00	+/-	2.60E-01	1.20E+00	3.42E-04	+/- 1.38E-05
m	22	383.39	2.56E+00	+/-	2.57E-01	1.20E+00	3.40E-04	+/- 1.37E-05
	23	393.55	6.52E+00	+/-	3.31E-01	1.19E+00	3.31E-04	+/- 1.34E-05
	24	413.70	1.53E+01	+/-	4.36E-01	1.19E+00	3.16E-04	+/- 1.28E-05
	25	423.30	7.75E-01	+/-	1.75E-01	1.19E+00	3.09E-04	+/- 1.26E-05
	26	452.07	1.64E+00	+/-	1.58E-01	1.18E+00	2.89E-04	+/- 1.20E-05
	27	619.36	2.12E-01	+/-	9.21E-02	1.15E+00	2.09E-04	+/- 1.01E-05
	28	662.42	9.67E-01	+/-	1.08E-01	1.15E+00	1.95E-04	+/- 9.62E-06
	29	722.01	4.04E-01	+/-	6.89E-02	1.14E+00	1.79E-04	+/- 8.87E-06
	30	1085.91	8.53E-02	+/-	3.36E-02	1.11E+00	1.28E-04	+/- 4.75E-06
	31	1112.12	5.03E-02	+/-	3.74E-02	1.11E+00	1.27E-04	+/- 4.65E-06
	32	1408.01	5.41E-02	+/-	2.21E-02	1.10E+00	1.15E-04	+/- 7.14E-06
	33	2236.00	1.00E+02	+/-	1.52E+00	1.08E+00	1.32E-04	+/- 3.24E-05

Segment: 4 Detector: DET01 (# 1) Position: 4

Elapsed Live Time: 98.33 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.351 +/- 0.0293
SE-75	264.65	0.000 +/- 0.0000	0.595 +/- 0.0242
SE-75	279.53	0.000 +/- 0.0000	0.592 +/- 0.0379
SE-75	400.65	0.000 +/- 0.0000	0.646 +/- 0.0646

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
	1	32.05	1.75E+01	+/-	8.73E-01	1.97E+00	1.18E-07	+/-	7.24E-07
	2	50.28	7.06E+00	+/-	1.66E+00	1.65E+00	1.09E-05	+/-	2.72E-05
	3	60.18	4.41E+02	+/-	6.06E+00	1.59E+00	3.62E-05	+/-	5.76E-05
	4	99.39	1.74E+02	+/-	3.70E+00	1.49E+00	2.64E-04	+/-	6.34E-05
	5	111.70	3.86E+01	+/-	2.14E+00	1.47E+00	3.35E-04	+/-	3.62E-05
	6	116.24	1.57E+01	+/-	2.88E+00	1.47E+00	3.58E-04	+/-	2.83E-05
M	7	125.97	2.20E+01	+/-	8.31E-01	1.46E+00	4.00E-04	+/-	2.37E-05
m	8	129.98	1.58E+02	+/-	2.90E+00	1.46E+00	4.14E-04	+/-	2.68E-05

9	144.73	1.93E+00	+/-	1.25E+00	1.43E+00	4.55E-04	+/-	4.31E-05
10	148.57	1.87E+01	+/-	1.44E+00	1.42E+00	4.63E-04	+/-	4.66E-05
11	171.75	7.23E+00	+/-	1.41E+00	1.36E+00	4.88E-04	+/-	5.76E-05
12	179.80	2.51E+00	+/-	1.45E+00	1.35E+00	4.90E-04	+/-	5.79E-05
13	189.86	4.49E+00	+/-	1.18E+00	1.33E+00	4.89E-04	+/-	5.65E-05
14	196.30	7.67E+00	+/-	1.10E+00	1.31E+00	4.87E-04	+/-	5.48E-05
15	208.66	1.03E+02	+/-	2.22E+00	1.29E+00	4.80E-04	+/-	5.05E-05
16	256.06	5.39E+00	+/-	8.85E-01	1.22E+00	4.36E-04	+/-	3.05E-05
M 17	264.77	1.53E+00	+/-	3.30E-01	1.21E+00	4.27E-04	+/-	2.75E-05
m 18	268.13	4.92E+00	+/-	5.90E-01	1.21E+00	4.23E-04	+/-	2.64E-05
M 19	298.10	3.00E+00	+/-	5.22E-01	1.21E+00	3.91E-04	+/-	1.92E-05
m 20	300.76	8.63E-01	+/-	2.88E-01	1.21E+00	3.89E-04	+/-	1.88E-05
21	311.90	5.55E+00	+/-	6.85E-01	1.20E+00	3.77E-04	+/-	1.75E-05
M 22	321.59	4.44E+00	+/-	5.40E-01	1.20E+00	3.68E-04	+/-	1.69E-05
m 23	324.03	6.19E+00	+/-	6.18E-01	1.20E+00	3.66E-04	+/-	1.68E-05
M 24	333.34	4.28E+01	+/-	1.20E+00	1.19E+00	3.57E-04	+/-	1.65E-05
m 25	336.29	1.48E+01	+/-	5.92E-01	1.19E+00	3.54E-04	+/-	1.65E-05
M 26	342.11	3.75E+00	+/-	3.27E-01	1.19E+00	3.49E-04	+/-	1.65E-05
m 27	345.62	3.77E+01	+/-	1.14E+00	1.19E+00	3.46E-04	+/-	1.65E-05
28	375.67	6.90E+01	+/-	1.73E+00	1.18E+00	3.21E-04	+/-	1.71E-05
M 29	380.81	1.81E+01	+/-	6.96E-01	1.18E+00	3.17E-04	+/-	1.72E-05
m 30	383.41	1.63E+01	+/-	6.28E-01	1.18E+00	3.15E-04	+/-	1.73E-05
31	393.51	3.66E+01	+/-	8.78E-01	1.18E+00	3.08E-04	+/-	1.75E-05
32	413.70	9.50E+01	+/-	1.57E+00	1.17E+00	2.94E-04	+/-	1.78E-05
33	423.22	6.25E+00	+/-	4.47E-01	1.17E+00	2.87E-04	+/-	1.79E-05
34	452.04	1.22E+01	+/-	4.68E-01	1.17E+00	2.70E-04	+/-	1.78E-05
35	598.24	1.51E-01	+/-	9.96E-02	1.14E+00	2.08E-04	+/-	1.35E-05
36	619.46	8.80E-01	+/-	1.35E-01	1.14E+00	2.02E-04	+/-	1.27E-05
37	646.46	6.55E-01	+/-	1.23E-01	1.14E+00	1.94E-04	+/-	1.18E-05
38	653.30	7.04E-01	+/-	1.63E-01	1.14E+00	1.93E-04	+/-	1.16E-05
39	662.42	5.71E+00	+/-	2.78E-01	1.14E+00	1.90E-04	+/-	1.13E-05
40	689.45	5.02E-01	+/-	1.13E-01	1.13E+00	1.84E-04	+/-	1.05E-05
41	703.98	1.99E-01	+/-	7.70E-02	1.13E+00	1.81E-04	+/-	1.01E-05
42	722.01	2.23E+00	+/-	1.76E-01	1.13E+00	1.77E-04	+/-	9.59E-06

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	769.88	6.36E-01 +/- 1.15E-01	1.12E+00	1.68E-04 +/- 8.56E-06
44	1001.03	4.82E-02 +/- 3.79E-02	1.11E+00	1.37E-04 +/- 6.33E-06
45	2236.00	1.00E+02 +/- 1.60E+00	1.07E+00	7.00E-05 +/- 3.84E-05

Segment: 5 Detector: DET01 (# 1) Position: 5

Elapsed Live Time: 83.94 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.283 +/- 0.0194
SE-75	279.53	0.000 +/- 0.0000	0.245 +/- 0.0459
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.11	3.03E+01 +/- 1.26E+00	4.10E+00	2.84E-07 +/- 1.87E-06
	2	49.97	2.17E+01 +/- 2.51E+00	4.10E+00	1.58E-05 +/- 4.29E-05
	3	60.16	1.06E+03 +/- 1.44E+01	4.10E+00	4.79E-05 +/- 8.23E-05
M	4	74.73	9.76E+00 +/- 2.08E+00	4.10E+00	1.25E-04 +/- 1.11E-04
m	5	78.19	4.96E+00 +/- 1.60E+00	4.10E+00	1.46E-04 +/- 1.11E-04
	6	99.35	3.72E+02 +/- 6.67E+00	4.10E+00	2.77E-04 +/- 7.11E-05
	7	111.67	7.64E+01 +/- 3.26E+00	4.10E+00	3.41E-04 +/- 3.83E-05
	8	116.34	3.84E+01 +/- 4.32E+00	4.10E+00	3.61E-04 +/- 2.88E-05
M	9	125.89	4.64E+01 +/- 1.33E+00	4.10E+00	3.97E-04 +/- 2.36E-05
m	10	129.94	3.29E+02 +/- 5.38E+00	4.10E+00	4.09E-04 +/- 2.72E-05
	11	148.57	3.97E+01 +/- 2.13E+00	2.93E+00	4.48E-04 +/- 4.84E-05
	12	172.04	1.54E+01 +/- 1.76E+00	2.31E+00	4.67E-04 +/- 5.93E-05
	13	179.85	7.07E+00 +/- 1.68E+00	2.20E+00	4.67E-04 +/- 5.93E-05
	14	189.89	1.24E+01 +/- 1.36E+00	2.07E+00	4.65E-04 +/- 5.77E-05
	15	196.24	1.51E+01 +/- 1.66E+00	2.00E+00	4.63E-04 +/- 5.58E-05
	16	208.64	2.11E+02 +/- 3.84E+00	1.89E+00	4.56E-04 +/- 5.12E-05
	17	255.95	1.20E+01 +/- 1.26E+00	1.60E+00	4.15E-04 +/- 3.05E-05
M	18	264.64	4.34E+00 +/- 5.55E-01	1.56E+00	4.06E-04 +/- 2.74E-05

m 19	268.15	1.06E+01	+/-	9.07E-01	1.57E+00	4.03E-04	+/-	2.62E-05
M 20	298.03	5.19E+00	+/-	7.19E-01	1.61E+00	3.74E-04	+/-	1.90E-05
m 21	300.81	2.16E+00	+/-	4.55E-01	1.61E+00	3.72E-04	+/-	1.86E-05
22	311.90	9.04E+00	+/-	1.01E+00	1.60E+00	3.62E-04	+/-	1.74E-05
M 23	321.58	9.35E+00	+/-	8.05E-01	1.59E+00	3.53E-04	+/-	1.68E-05
m 24	323.98	1.18E+01	+/-	8.65E-01	1.59E+00	3.51E-04	+/-	1.68E-05
M 25	333.33	9.11E+01	+/-	1.99E+00	1.58E+00	3.43E-04	+/-	1.67E-05
m 26	336.30	3.29E+01	+/-	9.41E-01	1.58E+00	3.41E-04	+/-	1.67E-05
M 27	342.13	4.11E+00	+/-	4.73E-01	1.58E+00	3.36E-04	+/-	1.68E-05
m 28	345.62	7.32E+01	+/-	1.76E+00	1.57E+00	3.34E-04	+/-	1.69E-05
29	375.62	1.42E+02	+/-	2.92E+00	1.55E+00	3.11E-04	+/-	1.79E-05
M 30	380.77	3.40E+01	+/-	1.07E+00	1.55E+00	3.08E-04	+/-	1.81E-05
m 31	383.37	3.23E+01	+/-	1.00E+00	1.55E+00	3.06E-04	+/-	1.82E-05
32	393.47	7.20E+01	+/-	1.51E+00	1.54E+00	2.99E-04	+/-	1.85E-05
33	413.70	1.92E+02	+/-	2.98E+00	1.53E+00	2.86E-04	+/-	1.90E-05
34	423.17	9.68E+00	+/-	7.41E-01	1.52E+00	2.81E-04	+/-	1.91E-05
35	452.01	2.28E+01	+/-	7.29E-01	1.50E+00	2.65E-04	+/-	1.91E-05
36	598.12	7.73E-01	+/-	2.29E-01	1.43E+00	2.07E-04	+/-	1.46E-05
37	619.54	2.07E+00	+/-	2.48E-01	1.42E+00	2.01E-04	+/-	1.37E-05
38	646.48	6.57E-01	+/-	2.30E-01	1.41E+00	1.94E-04	+/-	1.27E-05
39	653.20	1.02E+00	+/-	2.65E-01	1.41E+00	1.92E-04	+/-	1.24E-05
M 40	659.36	5.75E-01	+/-	1.09E-01	1.41E+00	1.91E-04	+/-	1.22E-05
m 41	662.97	9.67E+00	+/-	5.45E-01	1.41E+00	1.90E-04	+/-	1.20E-05
42	689.56	8.16E-01	+/-	1.64E-01	1.40E+00	1.83E-04	+/-	1.11E-05

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	704.26	4.33E-01 +/- 1.03E-01	1.39E+00	1.80E-04 +/- 1.06E-05
44	722.01	5.00E+00 +/- 2.71E-01	1.39E+00	1.77E-04 +/- 1.01E-05
45	737.42	3.26E-01 +/- 9.97E-02	1.38E+00	1.73E-04 +/- 9.64E-06
46	756.60	4.42E-01 +/- 1.05E-01	1.38E+00	1.70E-04 +/- 9.14E-06
47	769.93	1.24E+00 +/- 1.51E-01	1.37E+00	1.67E-04 +/- 8.82E-06
48	964.13	1.75E-01 +/- 6.18E-02	1.32E+00	1.39E-04 +/- 6.40E-06
49	1001.03	3.86E-02 +/- 3.31E-02	1.32E+00	1.35E-04 +/- 6.17E-06
50	1408.01	2.34E-02 +/- 1.65E-02	1.26E+00	1.00E-04 +/- 6.78E-06
51	2236.00	1.00E+02 +/- 1.70E+00	1.21E+00	5.76E-05 +/- 3.29E-05
52	2294.69	1.66E-01 +/- 6.73E-02	1.21E+00	5.53E-05 +/- 3.45E-05
53	2338.48	8.86E-02 +/- 4.95E-02	1.21E+00	5.36E-05 +/- 3.57E-05

Segment: 6 Detector: DET01 (# 1) Position: 6

Elapsed Live Time: 83.83 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Minimum transmission used.
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.005 +/- 0.0025
SE-75	264.65	0.000 +/- 0.0000	0.254 +/- 0.0182
SE-75	279.53	0.000 +/- 0.0000	0.251 +/- 0.0430
SE-75	400.65	0.000 +/- 0.0000	0.000 +/- 0.0000

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.10	1.68E+01 +/- 9.46E-01	4.10E+00	4.79E-07 +/- 3.00E-06
	2	50.08	8.88E+00 +/- 1.83E+00	4.10E+00	2.18E-05 +/- 5.62E-05
	3	60.16	9.88E+02 +/- 1.35E+01	4.10E+00	6.07E-05 +/- 9.93E-05
	4	99.33	3.61E+02 +/- 6.52E+00	4.10E+00	3.06E-04 +/- 7.50E-05
	5	111.67	6.87E+01 +/- 3.20E+00	4.10E+00	3.68E-04 +/- 4.00E-05
	6	116.24	4.67E+01 +/- 4.25E+00	4.10E+00	3.88E-04 +/- 3.04E-05
M	7	125.92	4.58E+01 +/- 1.30E+00	4.10E+00	4.21E-04 +/- 2.46E-05
m	8	129.94	3.30E+02 +/- 5.38E+00	4.10E+00	4.33E-04 +/- 2.80E-05
	9	148.57	3.75E+01 +/- 2.11E+00	2.99E+00	4.69E-04 +/- 4.84E-05
	10	172.04	1.79E+01 +/- 2.09E+00	2.38E+00	4.85E-04 +/- 5.88E-05

	11	179.83	5.16E+00	+/-	1.68E+00	2.26E+00	4.85E-04	+/-	5.88E-05
	12	189.96	1.10E+01	+/-	1.77E+00	2.14E+00	4.82E-04	+/-	5.72E-05
	13	196.26	1.39E+01	+/-	1.35E+00	2.07E+00	4.80E-04	+/-	5.54E-05
	14	208.64	2.05E+02	+/-	3.77E+00	1.95E+00	4.72E-04	+/-	5.09E-05
	15	238.64	2.51E+00	+/-	8.23E-01	1.74E+00	4.48E-04	+/-	3.79E-05
	16	244.70	2.04E+00	+/-	1.30E+00	1.71E+00	4.43E-04	+/-	3.54E-05
	17	255.98	1.42E+01	+/-	1.38E+00	1.65E+00	4.33E-04	+/-	3.09E-05
M	18	264.42	4.18E+00	+/-	5.34E-01	1.61E+00	4.25E-04	+/-	2.80E-05
m	19	268.12	9.03E+00	+/-	8.23E-01	1.61E+00	4.22E-04	+/-	2.67E-05
	20	298.06	3.83E+00	+/-	1.05E+00	1.60E+00	3.94E-04	+/-	1.97E-05
	21	311.90	9.07E+00	+/-	1.01E+00	1.59E+00	3.82E-04	+/-	1.81E-05
M	22	321.65	7.81E+00	+/-	7.98E-01	1.58E+00	3.74E-04	+/-	1.75E-05
m	23	324.01	1.11E+01	+/-	8.93E-01	1.58E+00	3.72E-04	+/-	1.74E-05
M	24	333.31	8.91E+01	+/-	1.96E+00	1.57E+00	3.65E-04	+/-	1.73E-05
m	25	336.29	3.23E+01	+/-	9.26E-01	1.57E+00	3.62E-04	+/-	1.73E-05
	26	345.61	6.69E+01	+/-	1.43E+00	1.56E+00	3.55E-04	+/-	1.74E-05
	27	368.80	2.67E+01	+/-	1.27E+00	1.55E+00	3.38E-04	+/-	1.82E-05
	28	375.63	1.39E+02	+/-	2.90E+00	1.54E+00	3.34E-04	+/-	1.84E-05
M	29	380.76	3.45E+01	+/-	1.07E+00	1.54E+00	3.30E-04	+/-	1.86E-05
m	30	383.34	3.27E+01	+/-	9.95E-01	1.54E+00	3.28E-04	+/-	1.87E-05
	31	393.45	7.10E+01	+/-	1.51E+00	1.53E+00	3.22E-04	+/-	1.90E-05
	32	413.70	1.95E+02	+/-	3.02E+00	1.52E+00	3.09E-04	+/-	1.95E-05
	33	423.12	1.07E+01	+/-	5.89E-01	1.51E+00	3.04E-04	+/-	1.96E-05
	34	452.04	2.31E+01	+/-	7.34E-01	1.49E+00	2.88E-04	+/-	1.97E-05
	35	482.08	6.29E-01	+/-	3.17E-01	1.48E+00	2.73E-04	+/-	1.93E-05
	36	619.48	2.19E+00	+/-	2.51E-01	1.41E+00	2.22E-04	+/-	1.43E-05
	37	646.47	1.07E+00	+/-	1.62E-01	1.40E+00	2.15E-04	+/-	1.32E-05
	38	653.29	3.67E-01	+/-	2.79E-01	1.40E+00	2.13E-04	+/-	1.30E-05
M	39	659.44	5.80E-01	+/-	1.13E-01	1.40E+00	2.11E-04	+/-	1.27E-05
m	40	662.97	9.08E+00	+/-	5.16E-01	1.40E+00	2.10E-04	+/-	1.26E-05
	41	689.27	9.50E-01	+/-	1.89E-01	1.39E+00	2.03E-04	+/-	1.16E-05
	42	704.36	3.42E-01	+/-	1.15E-01	1.38E+00	2.00E-04	+/-	1.11E-05

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	709.88	2.79E-01 +/- 1.01E-01	1.38E+00	1.98E-04 +/- 1.09E-05
44	722.01	4.51E+00 +/- 2.65E-01	1.38E+00	1.95E-04 +/- 1.05E-05
45	737.67	1.95E-01 +/- 7.62E-02	1.37E+00	1.92E-04 +/- 1.01E-05
46	756.92	6.10E-01 +/- 1.05E-01	1.37E+00	1.88E-04 +/- 9.53E-06
47	769.97	1.39E+00 +/- 1.32E-01	1.36E+00	1.85E-04 +/- 9.20E-06
48	780.65	1.27E-01 +/- 7.52E-02	1.36E+00	1.83E-04 +/- 8.95E-06
49	1085.91	6.24E-02 +/- 3.04E-02	1.30E+00	1.34E-04 +/- 5.68E-06
50	2236.00	1.00E+02 +/- 1.70E+00	1.21E+00	4.34E-05 +/- 2.42E-05

Segment: 7 Detector: DET01 (# 1) Position: 7

Elapsed Live Time: 95.35 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Some transmission peaks rejected.

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.000 +/- 0.0000
SE-75	264.65	0.000 +/- 0.0000	0.341 +/- 0.0189
SE-75	279.53	0.000 +/- 0.0000	0.338 +/- 0.0421
SE-75	400.65	0.000 +/- 0.0000	0.357 +/- 0.0597

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	32.04	1.92E+01 +/- 9.09E-01	2.24E+00	4.94E-09 +/- 2.83E-08
	2	50.25	1.36E+01 +/- 1.95E+00	1.83E+00	3.00E-06 +/- 7.00E-06
	3	60.17	6.67E+02 +/- 8.93E+00	1.75E+00	1.60E-05 +/- 2.39E-05
	4	99.37	2.15E+02 +/- 4.30E+00	1.62E+00	2.43E-04 +/- 5.52E-05
	5	111.68	4.48E+01 +/- 2.36E+00	1.60E+00	3.35E-04 +/- 3.49E-05
	6	116.27	1.93E+01 +/- 3.14E+00	1.59E+00	3.66E-04 +/- 2.82E-05
M	7	125.94	2.84E+01 +/- 9.45E-01	1.58E+00	4.24E-04 +/- 2.46E-05
m	8	129.97	1.97E+02 +/- 3.44E+00	1.57E+00	4.45E-04 +/- 2.77E-05
	9	148.57	2.39E+01 +/- 1.57E+00	1.55E+00	5.16E-04 +/- 4.85E-05
	10	171.99	9.14E+00 +/- 1.50E+00	1.53E+00	5.55E-04 +/- 6.09E-05
	11	179.79	2.28E+00 +/- 1.29E+00	1.53E+00	5.58E-04 +/- 6.12E-05
	12	190.03	4.29E+00 +/- 1.36E+00	1.52E+00	5.58E-04 +/- 5.97E-05
	13	196.32	8.85E+00 +/- 1.41E+00	1.51E+00	5.56E-04 +/- 5.79E-05
	14	208.66	1.15E+02 +/- 2.43E+00	1.50E+00	5.47E-04 +/- 5.32E-05

	15	225.99	1.54E+00	+/-	8.39E-01	1.49E+00	5.29E-04	+/-	4.52E-05
	16	256.02	5.38E+00	+/-	7.20E-01	1.47E+00	4.90E-04	+/-	3.18E-05
M	17	264.53	2.67E+00	+/-	4.13E-01	1.46E+00	4.78E-04	+/-	2.86E-05
m	18	268.14	6.23E+00	+/-	6.53E-01	1.46E+00	4.74E-04	+/-	2.74E-05
	19	298.04	3.31E+00	+/-	8.15E-01	1.46E+00	4.34E-04	+/-	2.02E-05
	20	311.90	4.98E+00	+/-	7.25E-01	1.46E+00	4.17E-04	+/-	1.86E-05
M	21	321.65	4.62E+00	+/-	5.82E-01	1.46E+00	4.05E-04	+/-	1.79E-05
m	22	324.16	6.06E+00	+/-	6.38E-01	1.46E+00	4.02E-04	+/-	1.78E-05
M	23	333.37	4.92E+01	+/-	1.28E+00	1.46E+00	3.91E-04	+/-	1.76E-05
m	24	336.30	1.97E+01	+/-	6.69E-01	1.45E+00	3.88E-04	+/-	1.76E-05
M	25	342.12	1.66E+00	+/-	3.50E-01	1.45E+00	3.82E-04	+/-	1.76E-05
m	26	345.64	4.23E+01	+/-	1.23E+00	1.45E+00	3.78E-04	+/-	1.76E-05
	27	375.66	8.06E+01	+/-	1.87E+00	1.45E+00	3.49E-04	+/-	1.82E-05
M	28	380.84	1.88E+01	+/-	7.19E-01	1.45E+00	3.44E-04	+/-	1.83E-05
m	29	383.37	1.89E+01	+/-	7.01E-01	1.45E+00	3.42E-04	+/-	1.84E-05
	30	393.49	3.98E+01	+/-	9.72E-01	1.44E+00	3.33E-04	+/-	1.86E-05
	31	413.70	1.09E+02	+/-	1.78E+00	1.44E+00	3.17E-04	+/-	1.88E-05
	32	423.15	6.04E+00	+/-	4.75E-01	1.43E+00	3.10E-04	+/-	1.88E-05
	33	452.02	1.25E+01	+/-	5.04E-01	1.42E+00	2.90E-04	+/-	1.86E-05
	34	598.42	2.65E-01	+/-	1.25E-01	1.36E+00	2.22E-04	+/-	1.40E-05
	35	619.41	1.08E+00	+/-	1.76E-01	1.35E+00	2.15E-04	+/-	1.32E-05
	36	646.44	2.47E-01	+/-	1.73E-01	1.34E+00	2.08E-04	+/-	1.23E-05
	37	653.24	4.47E-01	+/-	1.89E-01	1.34E+00	2.06E-04	+/-	1.20E-05
M	38	659.53	4.08E-01	+/-	8.60E-02	1.34E+00	2.04E-04	+/-	1.18E-05
m	39	663.01	5.19E+00	+/-	3.77E-01	1.34E+00	2.03E-04	+/-	1.17E-05
	40	689.61	3.30E-01	+/-	1.29E-01	1.33E+00	1.96E-04	+/-	1.09E-05
	41	704.05	2.78E-01	+/-	1.15E-01	1.32E+00	1.93E-04	+/-	1.05E-05
	42	722.01	2.95E+00	+/-	1.99E-01	1.32E+00	1.89E-04	+/-	9.99E-06

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Corrected Peak Count Rate (CpS)
43	756.63	3.26E-01 +/- 7.97E-02	1.31E+00	1.82E-04 +/- 9.18E-06
44	769.90	7.75E-01 +/- 1.05E-01	1.31E+00	1.79E-04 +/- 8.90E-06
45	964.13	7.52E-02 +/- 3.68E-02	1.27E+00	1.49E-04 +/- 6.59E-06
46	1001.03	5.06E-02 +/- 3.64E-02	1.26E+00	1.45E-04 +/- 6.33E-06
47	1408.01	3.12E-02 +/- 1.80E-02	1.22E+00	1.05E-04 +/- 7.16E-06
48	2236.00	1.00E+02 +/- 1.62E+00	1.18E+00	5.07E-05 +/- 2.69E-05

Segment: 8 Detector: DET01 (# 1) Position: 8

Elapsed Live Time: 107.84 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.342 +/- 0.0258
SE-75	264.65	0.000 +/- 0.0000	0.554 +/- 0.0182
SE-75	279.53	0.000 +/- 0.0000	0.628 +/- 0.0332
SE-75	400.65	0.000 +/- 0.0000	0.711 +/- 0.0484

PEAK ANALYSIS RESULTS

	Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
	1	31.98	5.78E+00 +/- 4.89E-01	2.00E+00	7.56E-06 +/- 7.37E-06
	2	50.12	3.99E+00 +/- 1.17E+00	1.67E+00	5.98E-05 +/- 2.94E-05
	3	60.18	2.04E+02 +/- 3.01E+00	1.61E+00	1.10E-04 +/- 3.84E-05
	4	99.42	6.06E+01 +/- 1.99E+00	1.50E+00	3.25E-04 +/- 3.30E-05
	5	111.69	9.18E+00 +/- 1.46E+00	1.49E+00	3.75E-04 +/- 2.72E-05
	6	116.14	1.77E+01 +/- 1.50E+00	1.48E+00	3.90E-04 +/- 2.56E-05
M	7	125.94	8.40E+00 +/- 5.10E-01	1.47E+00	4.19E-04 +/- 2.31E-05
m	8	130.01	5.85E+01 +/- 1.48E+00	1.47E+00	4.29E-04 +/- 2.26E-05
	9	148.57	5.79E+00 +/- 8.11E-01	1.43E+00	4.62E-04 +/- 2.28E-05
	10	172.09	3.16E+00 +/- 9.32E-01	1.38E+00	4.80E-04 +/- 2.51E-05
	11	179.76	2.63E+00 +/- 8.57E-01	1.37E+00	4.81E-04 +/- 2.57E-05
	12	190.04	1.48E+00 +/- 6.80E-01	1.35E+00	4.81E-04 +/- 2.61E-05
	13	196.37	2.67E+00 +/- 8.70E-01	1.34E+00	4.79E-04 +/- 2.62E-05
	14	208.68	3.13E+01 +/- 1.12E+00	1.32E+00	4.74E-04 +/- 2.60E-05
	15	256.09	1.56E+00 +/- 4.61E-01	1.25E+00	4.39E-04 +/- 2.28E-05
	16	268.36	9.31E-01 +/- 5.39E-01	1.23E+00	4.28E-04 +/- 2.17E-05
	17	298.06	9.52E-01 +/- 6.36E-01	1.18E+00	4.01E-04 +/- 1.90E-05
	18	311.90	7.24E-01 +/- 4.60E-01	1.17E+00	3.88E-04 +/- 1.78E-05
M	19	321.71	1.06E+00 +/- 3.16E-01	1.17E+00	3.79E-04 +/- 1.71E-05

m 20	324.02	1.44E+00	+/-	3.48E-01	1.17E+00	3.77E-04	+/-	1.69E-05
M 21	333.40	1.44E+01	+/-	6.37E-01	1.16E+00	3.69E-04	+/-	1.62E-05
m 22	336.32	4.96E+00	+/-	3.18E-01	1.16E+00	3.67E-04	+/-	1.60E-05
23	345.66	1.03E+01	+/-	4.69E-01	1.16E+00	3.59E-04	+/-	1.54E-05
24	375.69	2.28E+01	+/-	8.50E-01	1.14E+00	3.34E-04	+/-	1.38E-05
M 25	380.85	4.90E+00	+/-	3.53E-01	1.14E+00	3.30E-04	+/-	1.36E-05
m 26	383.42	5.06E+00	+/-	3.44E-01	1.14E+00	3.28E-04	+/-	1.35E-05
27	393.53	1.14E+01	+/-	4.49E-01	1.14E+00	3.21E-04	+/-	1.31E-05
28	413.70	2.91E+01	+/-	6.46E-01	1.13E+00	3.06E-04	+/-	1.25E-05
29	423.24	9.17E-01	+/-	2.33E-01	1.13E+00	3.00E-04	+/-	1.22E-05
30	446.33	3.04E-01	+/-	1.67E-01	1.13E+00	2.85E-04	+/-	1.17E-05
31	452.07	3.19E+00	+/-	2.48E-01	1.13E+00	2.82E-04	+/-	1.16E-05
32	646.66	1.75E-01	+/-	6.92E-02	1.11E+00	1.98E-04	+/-	9.58E-06
33	662.42	1.29E+00	+/-	1.46E-01	1.10E+00	1.93E-04	+/-	9.41E-06
34	689.41	2.08E-01	+/-	5.30E-02	1.10E+00	1.86E-04	+/-	9.10E-06
35	722.01	7.80E-01	+/-	1.08E-01	1.10E+00	1.78E-04	+/-	8.71E-06
36	2236.00	1.00E+02	+/-	1.54E+00	1.06E+00	1.19E-04	+/-	2.92E-05

Segment: 9 Detector: DET01 (# 1) Position: 9

Elapsed Live Time: 112.61 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.377 +/- 0.0204
SE-75	264.65	0.000 +/- 0.0000	0.587 +/- 0.0172
SE-75	279.53	0.000 +/- 0.0000	0.622 +/- 0.0276
SE-75	400.65	0.000 +/- 0.0000	0.654 +/- 0.0379

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)			Correction Factor	Original Efficiency		
1	32.17	2.02E+00	+/-	3.00E-01	1.89E+00	6.68E-09	+/-	3.99E-08
2	60.11	2.90E+01	+/-	8.79E-01	1.54E+00	1.64E-05	+/-	2.57E-05
3	95.46	2.88E+00	+/-	9.30E-01	1.46E+00	2.07E-04	+/-	6.10E-05
4	99.40	3.16E+00	+/-	1.06E+00	1.45E+00	2.36E-04	+/-	5.57E-05
5	129.29	1.64E+00	+/-	5.87E-01	1.42E+00	4.21E-04	+/-	2.66E-05
6	208.68	1.39E+00	+/-	3.54E-01	1.29E+00	5.11E-04	+/-	5.15E-05
7	304.55	5.19E-01	+/-	2.67E-01	1.19E+00	3.92E-04	+/-	1.84E-05
8	311.90	5.40E-01	+/-	2.96E-01	1.18E+00	3.83E-04	+/-	1.78E-05
9	375.65	7.20E-01	+/-	1.72E-01	1.17E+00	3.18E-04	+/-	1.78E-05
10	413.70	4.87E-01	+/-	9.35E-02	1.17E+00	2.88E-04	+/-	1.83E-05
11	559.21	7.91E-02	+/-	4.73E-02	1.14E+00	2.14E-04	+/-	1.49E-05
12	778.90	6.10E-02	+/-	2.99E-02	1.12E+00	1.62E-04	+/-	8.21E-06
13	1001.03	1.90E-02	+/-	1.79E-02	1.10E+00	1.35E-04	+/-	6.06E-06

14	2236.00	1.00E+02 +/- 1.51E+00	1.07E+00	6.12E-05 +/- 3.31E-05	

Segment: 10 Detector: DET01 (# 1) Position: 10

Elapsed Live Time: 113.25 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.360 +/- 0.0162
SE-75	264.65	0.000 +/- 0.0000	0.525 +/- 0.0151
SE-75	279.53	0.000 +/- 0.0000	0.572 +/- 0.0251
SE-75	400.65	0.000 +/- 0.0000	0.654 +/- 0.0353

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	31.93	1.17E+00 +/- 2.19E-01	1.95E+00	1.64E-05 +/- 1.63E-05
2	60.16	1.25E+01 +/- 6.08E-01	1.57E+00	1.37E-04 +/- 4.88E-05
3	413.70	1.21E-01 +/- 5.72E-02	1.17E+00	3.15E-04 +/- 1.29E-05
4	778.90	4.36E-02 +/- 1.95E-02	1.12E+00	1.76E-04 +/- 8.75E-06
5	1112.12	2.62E-02 +/- 1.51E-02	1.10E+00	1.29E-04 +/- 4.78E-06
6	2236.00	1.00E+02 +/- 1.50E+00	1.07E+00	9.04E-05 +/- 2.29E-05

Segment: 11 Detector: DET01 (# 1) Position: 11

Elapsed Live Time: 113.56 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.287 +/- 0.0163
SE-75	264.65	0.000 +/- 0.0000	0.401 +/- 0.0132
SE-75	279.53	0.000 +/- 0.0000	0.399 +/- 0.0201
SE-75	400.65	0.000 +/- 0.0000	0.470 +/- 0.0300

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.20	6.87E-01 +/- 1.62E-01	2.19E+00	1.31E-03 +/- 8.42E-03
2	50.71	1.71E+00 +/- 3.83E-01	1.79E+00	5.91E-04 +/- 1.52E-03
3	60.07	5.34E+00 +/- 4.71E-01	1.72E+00	5.04E-04 +/- 8.51E-04
4	185.71	7.89E-01 +/- 4.67E-01	1.48E+00	3.93E-04 +/- 4.88E-05
5	1112.12	2.61E-02 +/- 1.51E-02	1.18E+00	1.23E-04 +/- 5.40E-06
6	1173.38	6.10E-02 +/- 2.89E-02	1.17E+00	1.16E-04 +/- 5.07E-06
7	1333.24	6.10E-02 +/- 2.90E-02	1.16E+00	9.96E-05 +/- 5.46E-06
8	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	5.79E-05 +/- 3.30E-05

Segment: 12 Detector: DET01 (# 1) Position: 12

Elapsed Live Time: 113.74 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.083 +/- 0.0096
SE-75	264.65	0.000 +/- 0.0000	0.159 +/- 0.0083
SE-75	279.53	0.000 +/- 0.0000	0.172 +/- 0.0142
SE-75	400.65	0.000 +/- 0.0000	0.210 +/- 0.0199

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.43	1.07E+00 +/- 1.93E-01	3.76E+00	3.01E-09 +/- 1.81E-08
2	50.26	2.56E+00 +/- 3.84E-01	2.83E+00	2.19E-06 +/- 5.48E-06
3	60.17	3.24E+00 +/- 4.00E-01	2.64E+00	1.30E-05 +/- 2.08E-05
4	662.42	2.53E-02 +/- 1.79E-02	1.53E+00	1.82E-04 +/- 1.13E-05
5	722.01	6.08E-02 +/- 4.01E-02	1.51E+00	1.70E-04 +/- 9.57E-06
6	1001.03	4.34E-02 +/- 1.94E-02	1.41E+00	1.35E-04 +/- 6.07E-06
7	2236.00	1.00E+02 +/- 1.50E+00	1.27E+00	6.48E-05 +/- 3.54E-05

Segment: 13 Detector: DET01 (# 1) Position: 13

Elapsed Live Time: 113.97 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.355 +/- 0.0159
SE-75	264.65	0.000 +/- 0.0000	0.473 +/- 0.0138
SE-75	279.53	0.000 +/- 0.0000	0.452 +/- 0.0202
SE-75	400.65	0.000 +/- 0.0000	0.475 +/- 0.0301

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.20	7.42E-01 +/- 1.54E-01	1.95E+00	1.88E-08 +/- 1.21E-07
2	59.81	1.49E+00 +/- 3.11E-01	1.58E+00	2.19E-05 +/- 3.77E-05
3	148.57	5.37E-01 +/- 2.75E-01	1.43E+00	4.73E-04 +/- 5.02E-05
4	1333.11	5.19E-02 +/- 2.74E-02	1.16E+00	1.11E-04 +/- 5.81E-06
5	2236.00	1.00E+02 +/- 1.50E+00	1.13E+00	5.36E-05 +/- 3.03E-05

Segment: 14 Detector: DET01 (# 1) Position: 14

Elapsed Live Time: 114.12 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.917 +/- 0.0255
SE-75	264.65	0.000 +/- 0.0000	1.000 +/- 0.0000
SE-75	279.53	0.000 +/- 0.0000	0.986 +/- 0.0306
SE-75	400.65	0.000 +/- 0.0000	0.992 +/- 0.0447

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	49.71	2.00E+00 +/- 2.87E-01	1.05E+00	4.49E-05 +/- 1.13E-04
2	60.20	8.48E-01 +/- 2.52E-01	1.04E+00	9.60E-05 +/- 1.50E-04
3	964.13	1.94E-02 +/- 1.85E-02	1.00E+00	1.41E-04 +/- 6.33E-06
4	2236.00	1.00E+02 +/- 1.49E+00	1.00E+00	7.64E-05 +/- 4.15E-05

Segment: 15 Detector: DET01 (# 1) Position: 15

Elapsed Live Time: 114.18 sec Elapsed Real Time: 115.00 sec

Analysis Warnings:
Absorption Error Code: 11 (see manual for error code description)

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.941 +/- 0.0259
SE-75	264.65	0.000 +/- 0.0000	1.000 +/- 0.0000
SE-75	279.53	0.000 +/- 0.0000	1.000 +/- 0.0000
SE-75	400.65	0.000 +/- 0.0000	0.991 +/- 0.0443

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	32.57	4.20E-01 +/- 1.08E-01	1.05E+00	1.67E-09 +/- 1.03E-08
2	722.01	4.96E-02 +/- 2.59E-02	1.00E+00	1.64E-04 +/- 9.17E-06
3	1173.87	6.47E-02 +/- 3.57E-02	1.00E+00	1.12E-04 +/- 4.95E-06
4	1333.38	1.55E-01 +/- 3.67E-02	1.00E+00	9.74E-05 +/- 5.41E-06
5	2236.00	1.00E+02 +/- 1.49E+00	1.00E+00	3.18E-05 +/- 1.80E-05

Segment: 16 Detector: DET01 (# 1) Position: 16

Elapsed Live Time: 114.20 sec Elapsed Real Time: 115.00 sec

TRANSMISSION RESULTS

Nuclide	Energy	Container Transmission	Sample Transmission
SE-75	136.00	0.000 +/- 0.0000	0.869 +/- 0.0244
SE-75	264.65	0.000 +/- 0.0000	0.979 +/- 0.0232
SE-75	279.53	0.000 +/- 0.0000	0.958 +/- 0.0296
SE-75	400.65	0.000 +/- 0.0000	1.000 +/- 0.0000

PEAK ANALYSIS RESULTS

Peak No.	Energy (keV)	Net Peak Count Rate (CpS)	Correction Factor	Original Efficiency
1	129.29	3.68E-01 +/- 2.31E-01	1.06E+00	2.27E-04 +/- 1.46E-05
2	400.66	1.10E-01 +/- 5.90E-02	1.00E+00	1.84E-04 +/- 9.10E-06
3	559.16	5.18E-02 +/- 3.24E-02	1.00E+00	1.35E-04 +/- 7.69E-06
4	1173.85	9.77E-02 +/- 3.35E-02	1.00E+00	7.13E-05 +/- 3.33E-06
5	2236.00	1.00E+02 +/- 1.49E+00	1.00E+00	6.28E-05 +/- 1.87E-05

Summed Spectrum

Peak Locate Report

Sample ID: S100-2388
Peak Locate Performed on: 8-23-07 10:59:03 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192
Peak Search Sensitivity: 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
1	64.80	0.1056	32.07	40.58
2	100.77	0.1579	50.05	13.34
3	121.00	0.0324	60.16	414.01
4	152.42	0.3371	75.87	5.04
5	199.39	0.0421	99.36	224.72
6	224.03	0.0610	111.68	115.38
7	233.19	0.0698	116.26	46.12
8	260.58	0.0424	129.96	224.02
9	299.15	0.0862	149.24	62.36
10	331.16	0.1266	165.24	29.08
11	344.72	0.1537	172.03	18.46
12	360.27	0.1828	179.80	12.80
13	380.60	0.1555	189.97	17.24
14	393.25	0.1247	196.29	27.57
15	417.97	0.0437	208.65	218.55
16	452.85	0.2754	226.09	6.06
17	488.51	0.2402	243.92	6.73
18	512.67	0.1191	256.00	28.03
19	536.97	0.1313	268.15	25.49
20	596.74	0.1529	298.04	18.36
21	625.60	0.1096	312.46	31.81
22	643.28	0.1955	321.64	12.27
23	649.06	0.1614	324.06	15.13
24	667.22	0.0605	333.34	109.81
25	673.76	0.1012	336.30	45.65
26	684.36	0.1433	342.10	22.32
27	691.93	0.0600	345.63	112.68
28	751.97	0.0457	375.65	191.23
29	761.95	0.0820	380.79	66.68
30	767.76	0.0911	383.37	55.31
31	787.63	0.0602	393.48	97.52
32	829.27	0.0449	414.30	181.34
33	847.01	0.0910	423.17	48.85
34	904.73	0.0763	452.03	62.75
35	1196.90	0.2442	598.12	5.99
36	1239.62	0.1547	619.47	14.03

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance
37	1293.61	0.1588	646.47	13.99
38	1318.63	0.3056	659.41	6.72
39	1326.61	0.0929	663.00	39.34
40	1379.59	0.1888	689.46	9.51
41	1408.91	0.2279	704.12	7.48
42	1445.73	0.1123	722.53	27.07
43	1476.04	0.2680	737.69	5.28
44	1514.17	0.2118	756.75	7.30
45	1540.53	0.1882	769.93	9.46
46	2348.55	0.2208	1173.94	6.63
47	2667.42	0.2131	1333.38	6.96
48	2924.23	0.2357	1461.78	5.21
49	4472.02	0.0267	2235.68	398.94

Errors quoted at 1.000 sigma

Summed Spectrum

Peak Analysis Report

Sample ID: S100-2388
Peak Analysis Performed on: 8-23-07 10:59:03 AM
Peak Analysis From Channel: 40
Peak Analysis To Channel: 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	60-	71	64.80	32.07	1.12E+04	215.88	1.30E+04
2	94-	104	100.77	50.05	5.84E+03	368.15	5.28E+04
3	114-	127	121.00	60.16	3.22E+05	714.83	6.87E+04
4	145-	159	152.42	75.87	3.26E+03	448.48	6.78E+04
5	194-	203	199.39	99.36	1.12E+05	778.55	2.20E+05
6	217-	227	224.03	111.68	2.25E+04	547.57	1.14E+05
7	227-	240	233.19	116.26	1.08E+04	731.85	1.78E+05
8	256-	267	260.58	129.96	8.45E+04	505.12	6.65E+04
9	293-	304	299.15	149.24	1.18E+04	379.93	5.26E+04
10	328-	336	331.16	165.24	8.71E+02	283.52	3.70E+04
11	337-	351	344.72	172.03	4.90E+03	398.16	5.33E+04
12	355-	367	360.27	179.80	1.90E+03	342.61	4.38E+04
13	375-	387	380.60	189.97	3.50E+03	333.73	4.10E+04
14	389-	400	393.25	196.29	4.56E+03	306.47	3.56E+04
15	413-	425	417.97	208.65	6.25E+04	455.17	5.28E+04
16	450-	460	452.85	226.09	4.59E+02	224.09	2.08E+04
17	484-	495	488.51	243.92	1.12E+03	227.25	2.01E+04
18	507-	518	512.67	256.00	3.56E+03	218.78	1.77E+04
19	533-	544	536.97	268.15	1.67E+03	208.90	1.66E+04
20	592-	604	596.74	298.04	1.72E+03	202.19	1.49E+04
21	620-	631	625.60	312.46	2.89E+03	188.49	1.30E+04
M 22	638-	656	643.95	321.64	2.47E+03	136.26	1.23E+04
m 23	638-	656	648.78	324.06	3.35E+03	151.71	1.38E+04
M 24	662-	679	667.35	333.34	2.70E+04	263.12	8.99E+03
m 25	662-	679	673.27	336.30	1.01E+04	140.81	9.05E+03
M 26	679-	699	684.87	342.10	1.09E+03	80.31	1.08E+04
m 27	679-	699	691.93	345.63	2.22E+04	246.43	7.26E+03
28	746-	759	751.97	375.65	4.28E+04	365.06	2.96E+04
M 29	759-	775	762.25	380.79	1.03E+04	158.30	5.57E+03
m 30	759-	775	767.41	383.37	9.90E+03	148.59	4.76E+03
31	779-	795	787.63	393.48	2.17E+04	197.39	5.52E+03
32	821-	837	829.27	414.30	5.80E+04	264.45	3.82E+03
33	839-	852	847.01	423.17	2.85E+03	118.58	4.02E+03
34	898-	912	904.73	452.03	6.95E+03	109.62	1.77E+03
35	1188-	1201	1196.90	598.12	1.74E+02	33.56	3.46E+02
36	1231-	1247	1239.62	619.47	6.21E+02	44.96	4.48E+02
37	1290-	1298	1293.61	646.47	3.49E+02	30.70	2.75E+02

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	38	1315-	1334	1319.49	659.41	1.91E+02	19.04	2.51E+02
m	39	1315-	1334	1326.66	663.00	2.92E+03	83.44	2.32E+02
	40	1371-	1387	1379.59	689.46	2.38E+02	33.93	2.85E+02
	41	1400-	1413	1408.91	704.12	1.04E+02	25.96	2.05E+02
	42	1440-	1454	1445.73	722.53	1.43E+03	46.72	2.62E+02
	43	1467-	1484	1476.04	737.69	9.18E+01	25.74	1.75E+02
	44	1505-	1522	1514.17	756.75	1.63E+02	23.85	1.24E+02
	45	1532-	1548	1540.53	769.93	3.86E+02	28.30	1.33E+02
	46	2339-	2352	2348.55	1173.94	1.17E+02	16.17	5.30E+01
	47	2658-	2673	2667.42	1333.38	1.21E+02	14.72	3.19E+01
	48	2919-	2933	2924.23	1461.78	7.98E+01	13.43	3.22E+01
	49	4467-	4479	4472.02	2235.68	1.74E+05	417.79	2.86E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Summed Spectrum

Nuclide Identification Report

Sample ID: S100-2388
Nuclide Library Used: C:\WAS\NLIB\LLNL.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/)	Activity Uncertainty
Pulser	0.993	2236.00*	100.00	7.330E+02	1.999E+02
Np-237	0.744	300.10	6.63		
		311.90*	38.60	6.775E+00	4.461E-01
Pu-239	0.975	413.70*	0.00	4.346E+06	8.630E+04
Pu-239A	0.969	129.29*	0.01	1.232E+06	3.466E+04
Am-241	0.977	662.42*	0.00	1.209E+06	3.699E+04
Am-241D	0.981	722.01*	0.00	1.293E+06	4.471E+04
Pu-241	0.968	148.57*	0.00	5.171E+06	2.064E+05

* = Energy line found in the spectrum.
Energy Tolerance : 1.500 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

********** U N I D E N T I F I E D P E A K S **********

Peak Locate Performed on: 8-23-07 10:59:03 AM
Peak Locate From Channel: 40
Peak Locate To Channel: 8192

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	32.07	1.0351E+02	1.95
2	50.05	5.3991E+01	6.31
3	60.16	2.9803E+03	0.34
4	75.87	3.0133E+01	13.76
5	99.36	1.0330E+03	0.74
6	111.68	2.0806E+02	2.45
7	116.26	1.0013E+02	6.76
10	165.24	8.0535E+00	32.55
11	172.03	4.5296E+01	8.13
12	179.80	1.7584E+01	18.02
13	189.97	3.2369E+01	9.54
14	196.29	4.2125E+01	6.73
15	208.65	5.7779E+02	0.77
16	226.09	4.2431E+00	48.83
17	243.92	1.0337E+01	20.32
18	256.00	3.2892E+01	6.15
19	268.15	1.5396E+01	12.55
20	298.04	1.5865E+01	11.78
M 22	321.64	2.2799E+01	5.53
m 23	324.06	3.1010E+01	4.53
M 24	333.34	2.4964E+02	1.01
m 25	336.30	9.3017E+01	1.42
M 26	342.10	1.0108E+01	7.35
m 27	345.63	2.0542E+02	1.14
28	375.65	3.9527E+02	0.89
M 29	380.79	9.5608E+01	1.55
m 30	383.37	9.1514E+01	1.52
31	393.48	2.0055E+02	0.95
33	423.17	2.6326E+01	4.17
34	452.03	6.4254E+01	1.60
35	598.12	1.6122E+00	19.25
36	619.47	5.7419E+00	7.24
37	646.47	3.2278E+00	8.80
M 38	659.41	1.7652E+00	9.98
40	689.46	2.2000E+00	14.26
41	704.12	9.6547E-01	24.86
43	737.69	8.4883E-01	28.03
44	756.75	1.5053E+00	14.65
45	769.93	3.5690E+00	7.34
46	1173.94	1.0819E+00	13.82
47	1333.38	1.1198E+00	12.16
48	1461.78	7.3779E-01	16.83

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.000 sigma

Combined Segment NID

NID Results Combiner Mode: Sum Activities

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		8.05E+02	+/-	1.19E+02		3.63E-02	+/-	5.37E-03
SE-75	<	5.66E-01	+/-	3.82E-02	<	2.55E-05	+/-	1.72E-06
EU-152x	<	2.78E-01	+/-	2.05E-02	<	1.25E-05	+/-	9.23E-07
U-233	<	3.08E+04	+/-	2.49E+03	<	1.39E+00	+/-	1.12E-01
U-235		1.40E-01	+/-	8.47E-02		6.31E-06	+/-	3.82E-06
Np-237		8.29E+00	+/-	5.23E-01		3.74E-04	+/-	2.35E-05
Pu-238	<	5.23E+04	+/-	5.96E+03	<	2.36E+00	+/-	2.68E-01
U-238		5.86E+00	+/-	1.94E+00		2.64E-04	+/-	8.76E-05
Pu-239		5.50E+06	+/-	1.90E+05		2.48E+02	+/-	8.58E+00
Pu-239A		3.42E+06	+/-	1.38E+05		1.54E+02	+/-	6.21E+00
Am-241		1.44E+06	+/-	6.06E+04		6.50E+01	+/-	2.73E+00
Am-241D		1.58E+06	+/-	6.47E+04		7.12E+01	+/-	2.92E+00
Pu-241		9.47E+06	+/-	6.31E+05		4.26E+02	+/-	2.84E+01

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
U-235	6.49E-02	+/-	3.92E-02
Np-237	1.18E-02	+/-	7.42E-04
U-238	1.75E+01	+/-	5.80E+00
Pu-239	8.86E+01	+/-	3.07E+00
Pu-239A	5.50E+01	+/-	2.22E+00
Am-241	4.22E-01	+/-	1.77E-02
Pu-241	9.15E-02	+/-	6.10E-03

Summed Spectrum

Nuclide		Total Activity (uCi)				Concentration (uCi/g)		
Pulser		7.33E+02	+/-	2.00E+02		3.30E-02	+/-	9.00E-03
SE-75	<	1.21E+00	+/-	1.35E-02	<	5.45E-05	+/-	6.07E-07
EU-152x	<	6.48E-01	+/-	1.36E-02	<	2.92E-05	+/-	6.11E-07
U-233	<	7.03E+04	+/-	1.78E+03	<	3.17E+00	+/-	8.01E-02
U-235	<	1.67E+00	+/-	4.33E-02	<	7.51E-05	+/-	1.95E-06
Np-237		6.77E+00	+/-	4.46E-01		3.05E-04	+/-	2.01E-05
Pu-238	<	1.23E+05	+/-	2.90E+03	<	5.56E+00	+/-	1.30E-01
U-238	<	1.58E+01	+/-	2.59E-01	<	7.10E-04	+/-	1.17E-05
Pu-239		4.35E+06	+/-	8.63E+04		1.96E+02	+/-	3.89E+00
Pu-239A		1.23E+06	+/-	3.47E+04		5.55E+01	+/-	1.56E+00
Am-241		1.21E+06	+/-	3.70E+04		5.45E+01	+/-	1.67E+00
Am-241D		1.29E+06	+/-	4.47E+04		5.82E+01	+/-	2.01E+00
Pu-241		5.17E+06	+/-	2.06E+05		2.33E+02	+/-	9.30E+00

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
< = MDA

Nuclide	Mass (g)		
Np-237	9.62E-03	+/-	6.33E-04
Pu-239	7.00E+01	+/-	1.39E+00
Pu-239A	1.98E+01	+/-	5.58E-01
Am-241	3.53E-01	+/-	1.08E-02
Pu-241	5.00E-02	+/-	2.00E-03

Final Non-Uniformity Results

Source Longitudinal Ratio:	0.930	+/-	4.3202
Matrix Longitudinal Ratio:	0.897	+/-	3.9959
Source Vertical Ratio:	0.897	+/-	0.4512
Matrix Vertical Ratio:	0.850	+/-	0.2244

NUDS could not find the transmission peak in one radial segment.
NUDS could not find the source peak in one radial segment.